SimHQ Feature

DCS: A-10C Warthog CH Products Controller Assignments

IF YOU ARE LOOKING FOR THE ABBREVIATED VERSION, THERE ISN'T ONE.
THIS IS A COMPLEX STUDY SIM / GAME, AND SO IS THE PROGRAMMING SET UP FOR YOUR HOTAS. THIS ARTICLE WILL COVER ALL ASPECTS OF EACH CH Products CONTROLLER AND THEIR ASSIGNMENTS.

What better place to start than, the beginning! As this is a pretty complex study sim (happy?), you are going to want to open the DCS A-10C Flight Manual.pdf found in the Doc folder of your installed game.

Yes, I typed game; nobody really dies here as a result of either: bad piloting skills or some random bad guy, shooting you out of the sky. That makes this, a game, along with all the other games on your hard drive.

Once you've opened your DCS A-10C Flight Manual.pdf, click to page 85. This is where you'll begin to get an understanding of what button on your joystick, or HOTAS, when assigned in game (more on that later), can/will do. You'll note that for some of the buttons, they can and do have more than a single function based on the duration of time they are depressed (short or long).

[quote=DCS A-10C Flight Manul.pdf] Depending on selected Sensor Of Interest (SOI), many of the stick switches and buttons can have multiple functions. The most common means to set the SOI is by use of the Coolie Hat on the throttles. Possible SOI may include:

•Tactical Awareness Display (TAD) active
•Targeting Pod (TGP)
•Heads Up Display (HUD)
•AIM-9 Air-to-Air Missile
•AGM-65 Maverick Air-to-Ground Missile (MAV)

Additionally, many of the buttons and switches have alternate functions if they are held down for a Short period or a Long period (1 second or more). These include: [/quote]

In the rest of this article I'll walk you through programming your CH Products HOTAS using the FighterStick and ProThrottle-

NOTE: I WILL *NOT* BE USING A COMMAND FILE FOR THE HOTAS ASSIGNMENTS. ALL ASSIGNMENTS WILL BE MADE IN DX Mode.

Recommended FighterStick assignments:

You may at this point want to get and use something you can take notes on/with. May I suggest: FighterStick/ProThrottle pdf Follow the link, save as… The targeted link is a .pdf of the FighterStick and ProThrottle.

Let’s take some notes on what we want where…

Game DCS A10-C HOTAS **Mode** 1 **Desc.**

Author Ken -Ghost- King

Button 1 = Trigger

8. **Trigger.** Functions according to SOI include:

TAD	TGP	HUD	AIM-9	MAV
Fire Cannon	Fire Cannon	Fire Cannon	Fire Cannon	Fire Cannon

Button 2 = Weapon Release

6. **Weapon Release Button.** Functions according to SOI include:

TAD	TGP	HUD	AIM-9	MAV
Release Weapon	Release Weapon	Release Weapon	Release Weapon	Release Weapon

Note: For some weapons like JDAM and laser-guided bombs, you will need to hold down the weapon release button for a full one second.

Button 3 = HOTAS Master Mode Control

1. **Master Mode Control Button (MMCB).** Functions according to SOI include:

Duration	TAD	TGP	HUD	AIM-9	MAV
Short	Toggle HUD	Toggle HUD	Toggle HUD	Toggle HUD	Toggle HUD
Long	Air-to-Air Mode	Air-to-Air Mode	Air-to-Air Mode	Air-to-Air Mode	Air-to-Air Mode

Button 4 = Nose Wheel Steering On/Off

4. **Nosewheel Steering (NWS) Button.** Functions according to SOI include:

	TAD	TGP	HUD	AIM-9	MAV
On Ground	NWS	NWS	NWS	NWS	NWS
In Air	Lase / AR disconnect	Lase / AR disconnect	Lase / AR disconnect	Lase / AR disconnect	Lase / AR disconnect

Hat 1 Up (B5) = TMS Up Hat 1 Right (B6) = TMS Right Hat 1 Down (B7) Hat 1 Left (B8) = TMS Left

3. **Target Management Switch (TMS).** Functions according to SOI include:

Direction	Duration	TAD	TGP	HUD	AIM-9	MAV
Forward	Short	Hook	Track Toggle	Stabilize	Scan	Track
	Long	Make SPI	Make SPI	Make SPI	Make SPI	Make SPI
Aft	Short	Un-hook	INR Track	Set SPI Submode	Break Lock	Ground Stabilize
	Long	SPI to Steerpoint	SPI to Steerpoint	SPI to Steerpoint	SPI to Steerpoint	SPI to Steerpoint
Left	Short	Reset WCN	Reset WCN	Reset WCN	Reset WCN	Reset WCN
	Long					Space Stabilize
Right	Short	Mark Point	Mark Point	Mark Point	Mark Point	Mark Point
	Long					

CH Control Manager v4.51
Editing:DCS A10C Warthog.map
LastDL: DCS A10C Warthog.map
Program Settings
FighterStick
ProThrottle
ProPedals
CMS Controls
Hat 1 Up [B5]
DX Mode
Shift
Mode 1
DirectX Function
Normal Action
DirectX Device
CM Device 1
DirectX Control
Button 5
Shifted Action
DirectX Device
None
DirectX Control
None
Comment
TMS-Up
CH Control Manager - Version 4.51

CH Control Manager v4.51
Editing:DCS A10C Warthog.map
LastDL: DCS A10C Warthog.map
Program Settings
FighterStick
ProThrottle
ProPedals
CMS Controls
Hat 1 Right [B6]
DX Mode
Shift
Mode 1
DirectX Function
Normal Action
DirectX Device
CM Device 1
DirectX Control
Button 6
Shifted Action
DirectX Device
None
DirectX Control
None
Comment
TMS-Right
CH Control Manager - Version 4.51

CH Control Manager v4.51
Editing:DCS A10C Warthog.map
LastDL: DCS A10C Warthog.map
Program Settings
FighterStick
ProThrottle
ProPedals
CMS Controls
Hat 1 Down [B7]
DX Mode
Shift
Mode 1
DirectX Function
Normal Action
DirectX Device
CM Device 1
DirectX Control
Button 7
Shifted Action
DirectX Device
None
DirectX Control
None
Comment
TMS-Down
CH Control Manager - Version 4.51

CH Control Manager v4.51
Editing:DCS A10C Warthog.map
LastDL: DCS A10C Warthog.map
Program Settings
FighterStick
ProThrottle
ProPedals
CMS Controls
Hat 1 Left [B8]
DX Mode
Shift
Mode 1
DirectX Function
Normal Action
DirectX Device
CM Device 1
DirectX Control
Button 8
Shifted Action
DirectX Device
None
DirectX Control
None
Comment
TMS-Left
CH Control Manager - Version 4.51

Hat 2 Up (B9) = DMS Up Hat 2 Right (B10) = DMS Right Hat 2 Down (B11) Hat 2 Left (B12) = DMS Left

2. **Data Management Switch (DMS).** Functions according to SOI include:

Direction	Duration	TAD	TGP	HUD	AIM-9	MAV
Forward		TAD Scale Increase	Zoom Increase	Steerpoint Increment		Reticle Up
Aft		TAD Scale Decrease	Zoom Decrease	Steerpoint Decrement		Reticle Down
Left	Short		FLIR Auto Focus	Gunsight Cycle	A-A Target Toggle	Reticle left
	Long	Broadcast SPI	Broadcast SPI	Broadcast SPI	Broadcast SPI	Broadcast SPI
Right	Short	Center/Depressed Mode	Laser Toggle	Gunsight Cycle	A-A Target Toggle	Reticle Right
	Long		LSS Toggle			

CH Control Manager v4.51
Editing:DCS A10C Warthog.map
LastDL: DCS A10C Warthog.map
Program Settings
FighterStick
ProThrottle
ProPedals
CMS Controls
Hat 2 Right [B10]
DX Mode
Shift
Mode 1
DirectX Function
Normal Action
DirectX Device
CM Device 1
DirectX Control
Button 10
Shifted Action
DirectX Device
None
DirectX Control
None
Comment
DMS-Right
CH Control Manager - Version 4.51

CH Control Manager v4.51
Editing:DCS A10C Warthog.map
LastDL: DCS A10C Warthog.map
Program Settings
FighterStick
ProThrottle
ProPedals
CMS Controls
Hat 2 Down [B11]
DX Mode
Shift
Mode 1
DirectX Function
Normal Action
DirectX Device
CM Device 1
DirectX Control
Button 11
Shifted Action
DirectX Device
None
DirectX Control
None
Comment
DMS-Down
CH Control Manager - Version 4.51

Hat 3 Up (B13) = CMS Up Hat 3 Right (B14) = CMS Right Hat 3 Down (B15) = CMS Down Hat 3 Left (B16) = CMS Left

5. **Countermeasures Switch (CMS).** Functions according to SOI include:

	TAD	TGP	HUD	AIM-9	MAV
Forward	Start Program	Start Program	Start Program	Start Program	Start Program
Aft	End Program	End Program	End Program	End Program	End Program
Left	Next Program	Next Program	Next Program	Next Program	Next Program
Right	Previous Program	Previous Program	Previous Program	Previous Program	Previous Program

CH Control Manager v4.51
Editing:DCS A10C Warthog.map
LastDL: DCS A10C Warthog.map
Program Settings
FighterStick
ProThrottle
ProPedals
CMS Controls
Hat 3 Right [B14]
DX Mode
Shift
Mode 1
DirectX Function
Normal Action
DirectX Device
CM Device 1
DirectX Control
Button 14
Shifted Action
DirectX Device
None
DirectX Control
None
Comment
CMS-RT-Next-PGM
CH Control Manager - Version 4.51

CH Control Manager v4.51
Editing:DCS A10C Warthog.map
LastDL: DCS A10C Warthog.map
Program Settings
FighterStick
ProThrottle
ProPedals
CMS Controls
Hat 3 Down [B15]
DX Mode
Shift
Mode 1
DirectX Function
Normal Action
DirectX Device
CM Device 1
DirectX Control
Button 15
Shifted Action
DirectX Device
None
DirectX Control
None
Comment
CMS-AFT-End-PGM
CH Control Manager - Version 4.51

This next portion is optional, **IF** you have some kind of head tracking device. Otherwise , you may want to assign the POV (Point Of View) Hat as, well, a POV Hat. You will have to un-check Use as POV. Make sure DX Mode is checked. In the DirectX Function (Normal Action) select: DirectX Device CM Device 1 and DirectX Control Button 17, 18, 19, and 20

7. **Trim Switch.** Functions according to SOI include:

	TAD	TGP	HUD	AIM-9	MAV
Forward	Trim Pitch	Trim Pitch	Trim Pitch	Trim Pitch	Trim Pitch
Aft	Trim Pitch	Trim Pitch	Trim Pitch	Trim Pitch	Trim Pitch
Left	Trim Roll	Trim Roll	Trim Roll	Trim Roll	Trim Roll
Right	Trim Roll	Trim Roll	Trim Roll	Trim Roll	Trim Roll

Buttons 21 and 23 in the Shifted Action of DirectX Function, I will assign to trimming my Yaw. (in-game controller options/assignments)

Follow along…

CH Control Manager v4.51
Editing:DCS A10C Warthog.map
LastDL: DCS A10C Warthog.map
Program Settings
FighterStick
ProThrottle
ProPedals
CMS Controls
POV Up
DX Mode
Use as POV
Mode 1
DirectX Function
Normal Action
DirectX Device
CM Device 1
DirectX Control
Button 17
Shifted Action
DirectX Device
None
DirectX Control
None
Comment
Trim-Nose-Down
CH Control Manager - Version 4.51

CH Control Manager v4.51
Editing:DCS A10C Warthog.map
LastDL: DCS A10C Warthog.map
Program Settings
FighterStick
ProThrottle
ProPedals
CMS Controls
POV Right
DX Mode
Use as POV
Mode 1
DirectX Function
Normal Action
DirectX Device
CM Device 1
DirectX Control
Button 18
Shifted Action
DirectX Device
CM Device 1
DirectX Control
Button 21
Comment
Trim-Right-Wing-Down
CH Control Manager - Version 4.51

And that's just the FighterStick! Thankfully, the FighterStick somewhat resembles the A10-C control stick and we'll be able to assign those functions accordingly. We'll get into the how to of it all here shortly.

You may have noticed, the ProThrottle looks NOTHING like the A10-C dual throttle or any other aircraft for that matter?

So, what I put where on the ProThrottle may differ from what you'd like. No worries do what feels right for you. That said; let's look at what's assignable in the game:

This is where the magic of Control Manager REALLY comes in handy. Like I said, the ProThrottle looks nothing like the A10 dual throttle, nor, does it have the buttons/switches. Or does it? Remember the Shifted Action I assigned to the FighterStick POV? Well, to make those assignments work, you'll have to assign a button to Shift. Like this:

3. **Boat Switch.** Functions according to SOI include:

Direction	TAD	TGP	HUD	AIM-9	MAV
Forward		FLIR BHOT			Black Symbols
Aft		FLIR WHOT			White Symbols
Center		CCD			Force Correlate / AUTO

1. **Mic Switch.** Functions according to SOI include:

Direction	TAD	TGP	HUD	AIM-9	MAV
Forward	VHF 1 Transmit	VHF 1 Transmit	VHF 1 Transmit	VHF 1 Transmit	VHF 1 Transmit
Aft	VHF 2 Transmit	VHF 2 Transmit	VHF 2 Transmit	VHF 2 Transmit	VHF 2 Transmit
Up					
Down	UHF Transmit	UHF Transmit	UHF Transmit	UHF Transmit	UHF Transmit

CH Control Manager v4.51
Editing:DCS A10C Warthog.map
LastDL: DCS A10C Warthog.map
Program Settings
FighterStick
ProThrottle
ProPedals
CMS Controls
POV Right
DX Mode
Use as POV
Mode 1
DirectX Function
Normal Action
DirectX Device
CM Device 2
DirectX Control
Button 19
Shifted Action
DirectX Device
CM Device 2
DirectX Control
Button 30
Comment
Boat-Switch-FWD / MIC-Switch-FWD
CH Control Manager - Version 4.51

CH Control Manager v4.51
Editing:DCS A10C Warthog.map
LastDL: DCS A10C Warthog.map
Program Settings
FighterStick
ProThrottle
ProPedals
CMS Controls
POV Down
DX Mode
Use as POV
Mode 1
DirectX Function
Normal Action
DirectX Device
CM Device 2
DirectX Control
Button 32
Shifted Action
DirectX Device
None
DirectX Control
None
Comment
HOTAS-MIC-Switch-Down
CH Control Manager - Version 4.51

4. **China Hat.** Functions according to SOI include:

Direction	Duration	TAD	TGP	HUD	AIM-9	MAV
Forward	Short	FOV EXP Toggle	FOV Wide / NARO Toggle	Set Mav as SOI	Uncage	FOV Toggle
	Long	Slave all to SPI	Slave all to SPI	Slave all to SPI	Slave AIM-9 to TGP LOS	Slave all to SPI
Aft	Short	Reset Cursor	Boresight TGP	Cage TDC to TVV	Missile Step	Missile Step
	Long	Slave TGP to Steerpoint	Slave TGP to Steerpoint	Slave TGP to Steerpoint	Slave TGP to Steerpoint	Slave TGP to Steerpoint

5. **Pinky Switch.** Functions according to SOI include:

Direction	TAD	TGP	HUD	AIM-9	MAV
Forward	Default External Lights	Default External Lights	Default External Lights	Default External Lights	Default External Lights
Aft	Lights according to Panel	Lights according to Panel	Lights according to Panel	Lights according to Panel	Lights according to Panel
Center	Exterior lights off	Exterior lights off	Exterior lights off	Exterior lights off	Exterior lights off

Okay, for the Pinky Button, to be assigned to my pinky, I had to use a Command File. Using List Mode in Control Manager however, made this possible.

6. **Left Throttle Button.** Functions according to SOI include:

TAD	TGP	HUD	AIM-9	MAV
Toggle Autopilot	Toggle Autopilot	Toggle Autopilot	Toggle Autopilot	Toggle Autopilot

7. **Slew Control.** Functions according to SOI include:

TAD	TGP	HUD	AIM-9	MAV
Slew TAD cursor	Slew TGP LOS	Slew TDC	Slew AIM-9 Seeker / Consent	Slew Maverick / Consent

8. **Coolie Hat.** Functions according to SOI include:

Direction	Duration	TAD	TGP	HUD	AIM-9	MAV
Up		HUD as SOI	HUD as SOI	HUD as SOI	HUD as SOI	HUD as SOI
Down	Short	Swap MFCD Content	Swap MFCD Content	Swap MFCD Content	Swap MFCD Content	Swap MFCD Content
	Long	DSMS Quick Look	DSMS Quick Look	DSMS Quick Look	DSMS Quick Look	DSMS Quick Look
Left	Short	Cycle Left MFCD	Cycle Left MFCD	Cycle Left MFCD	Cycle Left MFCD	Cycle Left MFCD
	Long	Set Left MFCD as SOI	Set Left MFCD as SOI	Set Left MFCD as SOI	Set Left MFCD as SOI	Set Left MFCD as SOI
Right	Short	Cycle Right MFCD	Cycle Right MFCD	Cycle Right MFCD	Cycle Right MFCD	Cycle Right MFCD
	Long	Set Right MFCD as SOI	Set Right MFCD as SOI	Set Right MFCD as SOI	Set Right MFCD as SOI	Set Right MFCD as SOI

CH Control Manager v4.51
Editing:DCS A10C Warthog.map
LastDL: DCS A10C Warthog.map
Program Settings
FighterStick
ProThrottle
ProPedals
CMS Controls
Hat 2 Up [B12]
DX Mode
Shift
Mode 1
DirectX Function
Normal Action
DirectX Device
CM Device 2
DirectX Control
Button 12
Shifted Action
DirectX Device
None
DirectX Control
None
Comment
HOTAS-Coolie-Up
CH Control Manager - Version 4.51

CH Control Manager v4.51
Editing:DCS A10C Warthog.map
LastDL: DCS A10C Warthog.map
Program Settings
FighterStick
ProThrottle
ProPedals
CMS Controls
Hat 2 Right [B9]
DX Mode
Shift
Mode 1
DirectX Function
Normal Action
DirectX Device
CM Device 2
DirectX Control
Button 9
Shifted Action
DirectX Device
None
DirectX Control
None
Comment
HOTAS-Coolie-Right
CH Control Manager - Version 4.51

CH Control Manager v4.51
Editing:DCS A10C Warthog.map
LastDL: DCS A10C Warthog.map
Program Settings
FighterStick
ProThrottle
ProPedals
CMS Controls
Hat 2 Down [B10]
DX Mode
Shift
Mode 1
DirectX Function
Normal Action
DirectX Device
CM Device 2
DirectX Control
Button 10
Shifted Action
DirectX Device
None
DirectX Control
None
Comment
HOTAS-Coolie-Down
CH Control Manager - Version 4.51

CH Control Manager v4.51
Editing:DCS A10C Warthog.map
LastDL: DCS A10C Warthog.map
Program Settings
FighterStick
ProThrottle
Key Check
CMS Controls
Hat 2 Left [B11]
DX Mode
Shift
Mode 1
DirectX Function
Normal Action
DirectX Device
CM Device 2
DirectX Control
Button 11
Shifted Action
DirectX Device
None
DirectX Control
None
Comment
HOTAS-Coolie-Left
CH Control Manager - Version 4.51

2. **Speed Brake.** Functions according to SOI include:

Direction	TAD	TGP	HUD	AIM-9	MAV
Forward	Retract Brakes	Retract Brakes	Retract Brakes	Retract Brakes	Retract Brakes
Aft	Extend Brakes	Extend Brakes	Extend Brakes	Extend Brakes	Extend Brakes
Center	Hold Brake Position	Hold Brake Position	Hold Brake Position	Hold Brake Position	Hold Brake Position

You THOUGHT you were done? HA!

Okay, my game is patched up to v1.1.0.9. Seems each patch I've applied, I have to re-assign, in the games controller options the axis and button assignments. Before I can do that however I have to remove the previous assignments. The quickest, and easiest way to accomplish this is:

NOTE: THE FOLLOWING APPLIES TO WIN7 64 BIT OPERATING SYSTEMS

Next, in the Users File Folder you'll find two folders. One Public, one not. Open the one that is not by double clicking on it. Here you see my file folder labeled, Ken.

Computer ▸ WIN7 (C:) ▸ Users ▸ Ken ▸
Search Ken
Organize
Open
Include in library
Share with
Burn
New folder
Favorites
Desktop
Downloads
Recent Places
Libraries
Documents
Music
Pictures
Videos
Homegroup
Computer
WIN7 (C:)
DATA (D:)
DVD RW Drive (E:) C
Network
Name
Date modified
Type
Size
CH Control Manager 12/18/2010 12:12 ... File folder
Contacts 4/9/2011 8:40 AM File folder
Desktop 8/16/2011 8:27 PM File folder
Downloads 9/4/2011 3:53 PM File folder
Favorites 8/26/2011 2:39 PM File folder
Links 4/9/2011 8:40 AM File folder
My Documents 9/3/2011 7:05 AM File folder
My Music 4/9/2011 8:40 AM File folder
My Pictures 9/5/2011 7:28 AM File folder
My Videos 4/9/2011 8:40 AM File folder
Program Files (x86)
Saved Games 4/30/2011 6:07 PM File folder
Searches 4/9/2011 8:40 AM File folder
Open the Saved Games File Folder by double clicking on it…
Saved Games Date modified: 4/30/2011 6:07 PM
File folder

Computer ▸ WIN7 (C:) ▸ Users ▸ Ken ▸ Saved Games ▸
Search Saved Games
Organize
Include in library
Share with
Burn
New folder
Favorites
Desktop
Downloads
Recent Places
Libraries
Documents
Music
Pictures
Videos
Homegroup
Computer
WIN7 (C:)
DATA (D:)
DVD RW Drive (E:) C
Network
Name
Date modified
Type
Size
DCS Warthog
9/5/2011 7:26 AM
File folder
Microsoft Games
2/21/2011 10:44 A...
File folder
ThirdWire
11/6/2010 7:07 PM
File folder
Double click on DCS Warthog, opening it up…
3 items

Computer ▸ WIN7 (C:) ▸ Users ▸ Ken ▸ Saved Games ▸ DCS Warthog ▸
Search DCS Warthog
Organize
Open
Share with
Burn
New folder
Favorites
Desktop
Downloads
Recent Places
Libraries
Documents
Music
Pictures
Videos
Homegroup
Computer
WIN7 (C:)
DATA (D:)
DVD RW Drive (E:) C
Network
Name
Date modified
Type
Size
Config 5/6/2011 6:16 AM File folder
Data 6/2/2011 10:36 PM File folder
InputLayoutsTxt 5/9/2011 10:24 AM File folder
Logs 9/4/2011 4:43 PM File folder
MissionEditor 5/1/2011 5:31 AM File folder
Missions 4/30/2011 6:08 PM File folder
Movies 4/30/2011 6:08 PM File folder
ScreenShots 9/3/2011 2:22 PM File folder
GHOST 8/28/2011 12:07 PM LUA File 60 KB
GHOST2 5/7/2011 3:58 PM LUA File 65 KB
GHOSTCH 9/3/2011 2:22 PM LUA File 64 KB
Delete any LUA Files you may have previously created…
3 items selected Date modified: 5/7/2011 3:58 PM - 9/3/... Date created: 5/6/2011 6:31 AM - 9/3/2011 2:22 PM
Size: 187 KB

Okay, NOW for the fun stuff…

The map you made and saved in Control Manager, open it, and download it…

Now we get to go into the game and assign the buttons and axes in the game controls options…

First, we'll assign your axes…

We'll clear the assignments…

This profile is a multiple controller profile, taking advantage of all assignable axes in DirectX. Therefore the games controller options will show (in this case) CM Device 1,2, and 3. The FighterStick being device 1, ProThrottle device 2 and the ProPedals device 3. You'll want to assign the axes accordingly…

I've already assigned JOY_BTN1 to my FighterStick trigger here on CM Device 1 now, I'll be assigning HOTAS Boat Switch Aft to CM Device 2 Button 23…

Now for the fun stuff part two. Here's where that Shift Button comes in (again). For my profile I have assigned to the POV on my ProThrottle my Boat Switch, and, my MIC Switch. For my Boat Switch to work I can simply highlight the button to assign and as before, assign it. Now the tricky part, assigning the MIC Switch to the POV on the ProThrottle as well. Prior to assigning the MIC Switch Up, Forward, or Aft, **HOLD** your button you've assigned to Shift on your controller. Then, assign the POV on the ProThrottle Up, Forward, and Aft. To assign the MIC Switch Down, there is no need to hold the Shift Button assigned to your controller.

Now that your HOTAS buttons and axes have been assigned in the game controller options, it's time to save the profile/LUA…

THIS time, to help me keep track of what version profile this is, I've chosen to save the profile/LUA as v1.1.0.9

And there you have it! Have FUN!

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