

Docusaurus v2



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ShonaScript Chii?

 NOT YET REVISED

ShonaScript i **programming language** inokubatsira kuti udzidzire kunyora **code ne shona**, kana usati wambonyora **code** zvachose.

 TSANANGURO

programming language - *i language inonzwisiswa ne computer*

code - *ma words, ma numbers, kana ma special characters akaita se ma brackets aya "{}, ()"*
anoshandiswa mu programming language

shona - *i language inoshandiswa ne mamwe ma Zimbabweans pakutaura*

Zvii zvinodiwa?

Kuti ugone kutanga kunyora **code** ne ShonaScript, panodiwa:

1. Computer  - yekunyorera **code**
2. Internet  - inongodiwa *pakudownloader* ma *files* nezvimwe zvaunozoshandisa

Tanga Pano

Teedzera *masteps* aya anodiwa kuti ugone kushandisa **ShonaScript**. Kana uchida kubatsirwa, unokurudzirwa kutaura *mugroup* re *whatsapp*

STEP 1: Node JS

 DOWNLOAD NODE JS

Unofana kudownloader software inonzi Node JS kana usati wamboidownload. Node JS inogona kukura zve 55MB

- Enda ku <https://nodejs.org/en/download/>, wo downloader Node JS inoenderana ne computer yaunoshandisa. Unoona paine windows, kana macOS



Unogona kuona video riripazasi apa kana uchikwanisa. Video iri harina kugadzirwa nesu, asi kana usiri kunzwisia zvikuitika, bvunza mu group re whatsapp

- Kana uchishandisa Windows unoenda mu command prompt, kana uchishandisa macOS unoenda mu terminal:

- Enda mu command prompt / terminal
- Nyora kuti node -v
 - unofana kuona nhamba inotanga na "v" sokuti v16.13.1
 - kana usiri kuona nhamba iyi, unogona kuvhara command prompt/terminal, oivhura oedza zvekare kuti node -v
 - kana usati waakuona nhamba, zvinoreva kuti hauna kugadzira NodeJS zvakanaka, saka taura mu group rewhatsapp, ubatsirwe.

3. Paku installer Node JS, chingobaya continue kana next kusvika waaku installer. Usachinje chinhu.

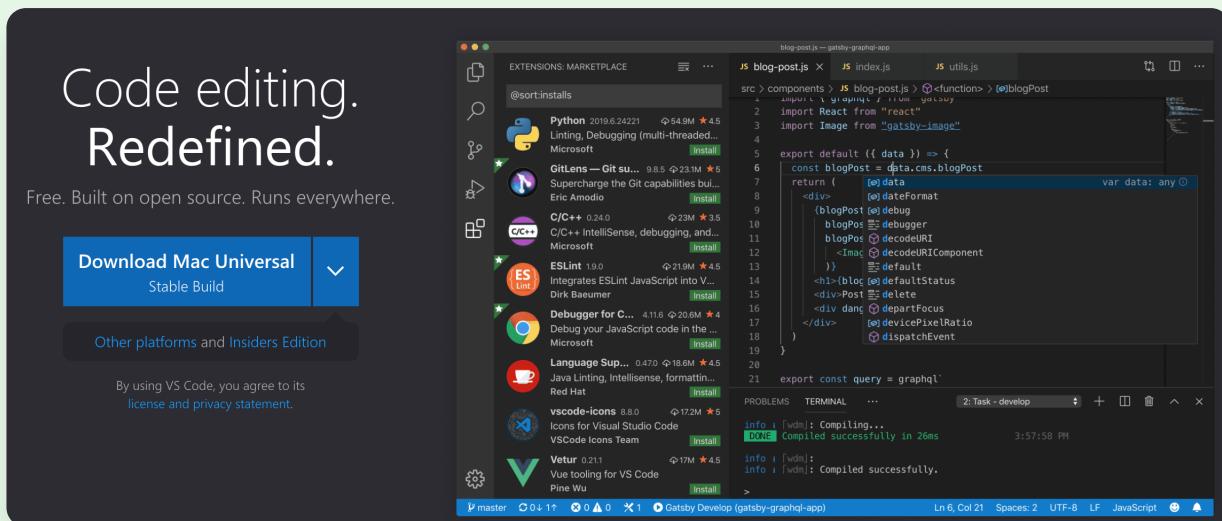
STEP 2: VS Code

Uchashandisa VS Code kunyora code yako. Usashandise imwe editor kunze kwe VS Code, nekuti VS Code ndiyo inokwanisa kuona ShonaScript.

DOWNLOAD VS CODE

VS Code inogona kukura zve 171MB

1. Enda ku <https://code.visualstudio.com/>, wo downloader VS Code inoenderana ne computer yaunoshandisa

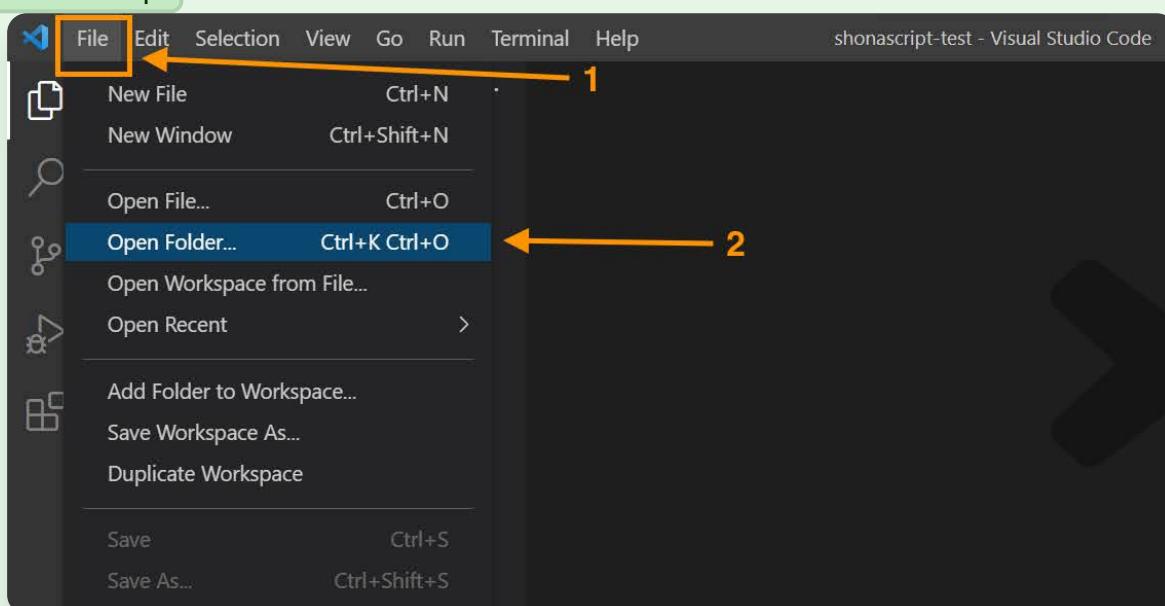


Unogona kuona [video](#) iri kana uchikwanisa:

STEP3: Gadzira Folder "shonascript"

GADZIRA FOLDER RESHONASCIPT

1. Enda mudesktop **folder** mako, ogadzira **folder** rakanzi **shonascript**
2. Vhura VS Code, woenda pamusoro pakanzi **file**
 - chienda pakanzi **Open Folder**, wotsvaga folder rako rawagadzira mu desktop rakanzi **shonascript**

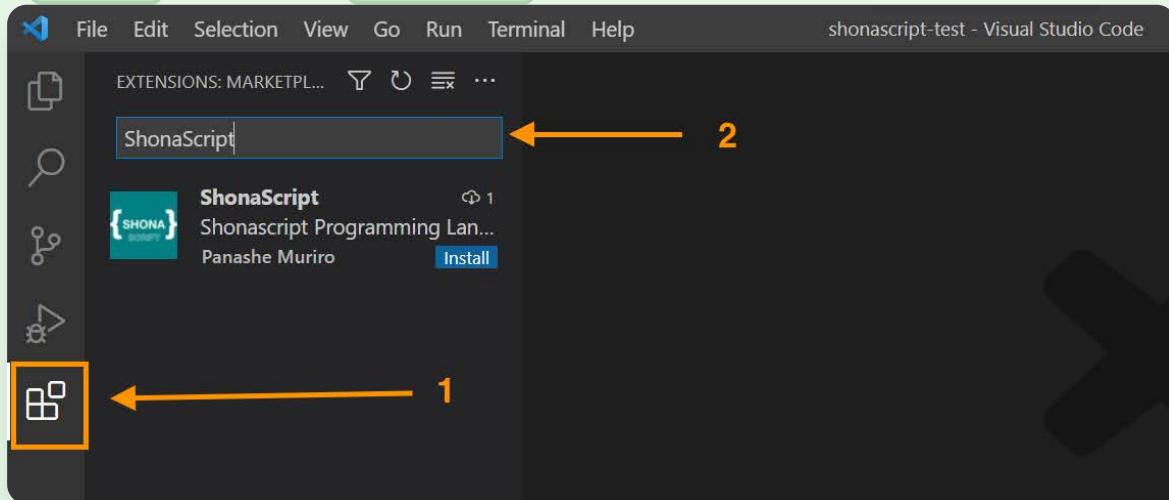


3. Kana pakabuda pakanzi **do you trust the authors**, unoti **yes**

Step 4: ShonaScript

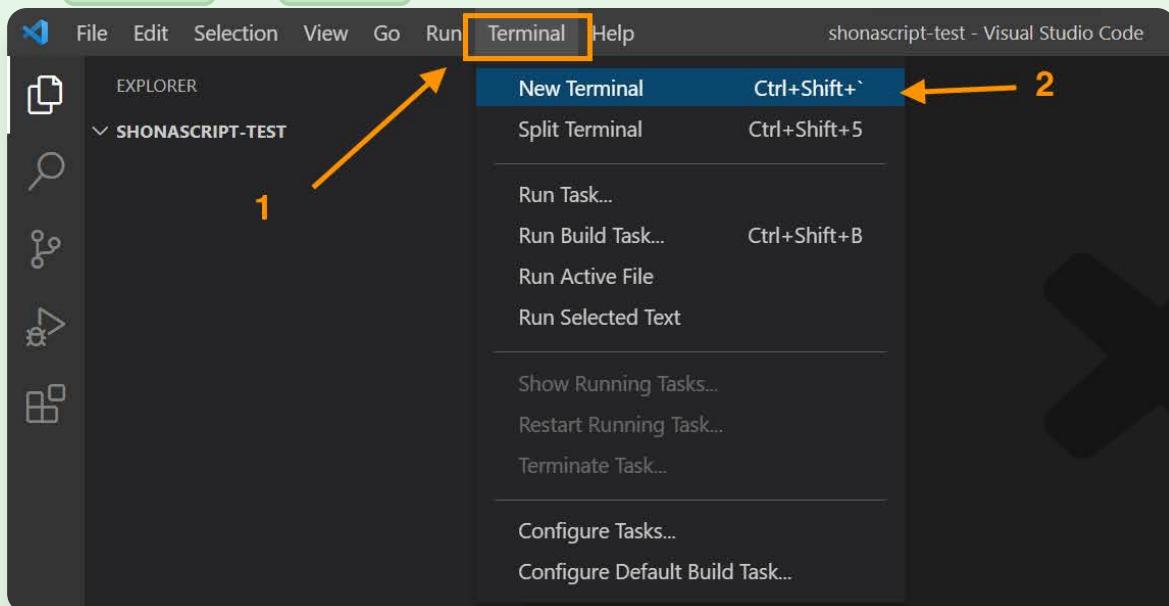
TIP

1. mu VS Code, enda pama extensions:

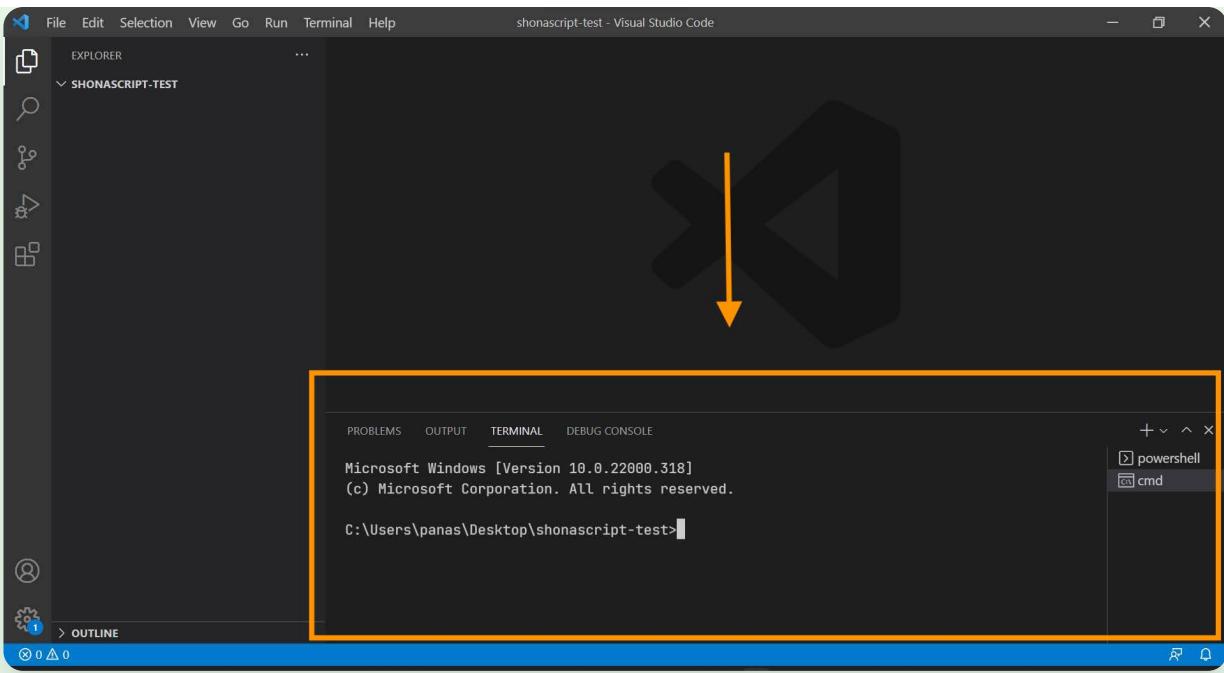


Onyora mu search box kuti ShonaScript, unofana kuona ShonaScript semu picture iri pamusoro apa. Wa downloader inonzi syntax highlighter apa.

2. vhura terminal mu VS Code



- Unofana kuona terminal pasi pescreen rako



3. Mu terminal:

- nyora kuti `npm i shona -g`, wobaya `enter`
- kana ukaona mu `terminal` makanzi `npm ERR`, ne `red`, edza kunyora: `sudo npm i shona -g`, wobaya `enter`
- chinonzi `shona` ndicho chinokubatsira kugadzira mafiles anodiwa

4. Mu terminal:

- nyora kuti `shona hesi` wobaya `enter`
- unofana kuona izvi mu `terminal`:

A screenshot of the Visual Studio Code interface, similar to the previous one but with the terminal output visible. The terminal window shows the command `shona hesi` and its output:

```
PS C:\Users\panas\Desktop\shonascript-test> shona hesi
Ndiri bhoo, ndovimba iweve uribhoo.
Wa downloader ShonaScript zvakanaka,
saka ndaa kumbotarisa mafiles acho kuti aripo here...
Mafiles anodiwa ndamashaya, saka ndaa kugadzira ma files aya
1. index.shona
2. shona.js
3. index.js
4. package.json
Ndapedza kugadzira.
Unonyora mu file rakanzi 'index.shona'.
Usanyore code mune mamwe ma files

Goodluck Zimbabwe
```

The status bar at the bottom right includes icons for Prettier, GitHub, and others.

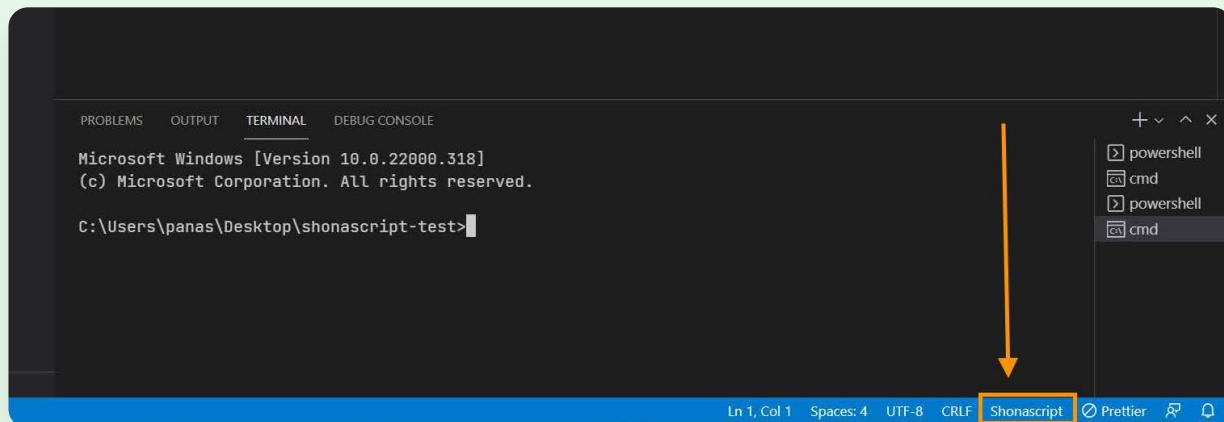
5. Ukatarisa mu `folder` rako rawagadzira riya mu `VS Code`, unofana kuona kuti `ShonaScript` yagadzira mafiles 4:

- `index.shona` - ndomauchanyora `code`
- `index.js` - usanyore chinhu umu
- `shona.js` - usanyore chinhu umu
- `package.json` - usanyore chinhu umu

6. Mu `terminal` zvekare, nyora kuti `npm i shonascript`, wobaya `enter`

- Unofana kuona mu folder rako rave ne zvinhu izvi:
 - folder rakanzi `node_modules`, usaribate
 - file rimwe rakanzi `package_lock.json`, usaribate

7. Chipinda mu `file` rakanzi `index.shona`, unofana kuona pazasi mu `VS Code` makanzi `Shonascript` seizedzi:



- izvi ndizvo zvinoreva kuti waakukwanisa kushandisa `ShonaScript`

8. Mu `index.shona`, dzima `line 1` wonyora kuti `nyora("Goodluck Zimbabwe")` pa `line 1` ipapo

9. Mu `terminal`, nyora kuti `node shona.js`, wobaya `enter`. Unofana kusaona ma line e `red` mu `terminal` kana `code` yako ichishanda.

10. Mu `terminal`, nyora kuti `node index.js`, wobaya `enter`. Unofana kuona mu `terminal` imomo makanzi `Goodluck Zimbabwe`.

Chienda kumberi udzidze kuti `code` yemu `ShonaScript` inonyorwa sei

 [Edit this page](#)

Ma Variables

⚠ NOT YET REVISED

Variable Chii?

Kuti unzwisise kuti ma variables chii, ndichapa muenzaniso we **hembe yaunofarira**. Ngatimboti iwewe une hembe yaunofarira, hembe iyoyo **ndeye red**. Iwewe ukuda kutuma mumwe munhu asingazine nezvehembe dzako kunotora hembe yaunofarira kwayakarongedzwa. Ukangoudza munhu uyu, kuti “*enda kunotora hembe yandofarira*”, munhu uyu achakubvunza kuti **hembe yaunofarira** yakaita sei, nekuti akaenda kunoitsvaga iye asingaizive haamboiwane.

⚠ TSANANGURO

- Uchishandisa muenzaniso uyu, munhu wauri kutuma i **computer**.
- Iwewe ndiwe munhu ari kuda kunyora code ne **Shonascript** kunotsvaga **hembe yaunofarira**.
- **Variable** apa i **hembe yaunofarira**, **hembe yaunofarira** yacho “**ndeye red**”

Manyorerwo ema variables

Saka unotaura sei ne **computer** nezve **hembe yaunofarira**? Unofana kunyora **code** inotaura ne **computer** seizvi:

Image Here



1 hembeYandinofarira = "ndeye red";

Image Here

Chii chikuitika apa? 😊

!(NGATIMBOTARISA KU LEFT KWE EQUAL SIGN (=).

Tanyora ma words 2 epa hembe yandinofarira akabatana kuita hembeYandinofarira. Manyorero aya anonzi lower camel casing. Unogona kuverenga nezvayo pano. Kana tichinyora ma variables, ku left kwemabrackets kunoiswa word one rakabatanidzwa. Izvi ndizvo zvinonzwisiswa ne computer. Unogona kubatanidza ma words aye kuita hembe_yandinofarira kana kuti HembeYandinofarira kana kuti hembeyandinofarira.

Ukaisa ma words 2 kuti hembe yandinofarira = "ndeye red", computer ichafunga kuti ukuedza kunyora two ma variables hembe na yandinofarira panguva imwe chete, saka inokuudza kuti manyorero awaita hembe yandinofarira haasiriwo. Tarisa mamwe manyorero asinganzwisiswe ne computer mu box re red pazasi

🔥 MANYORERO EKULEFT SIDE ASINGAITE

hembe yandinofarira = "ndeye red" -> ku left kunofana kuenda one word

hembeYandinofarira = "ndeye red" -> usatange zita re variable ne number kana !@#\$%^&*

hembe-yandinofarira = "ndeye red" -> usaise hyphen(-) muzita re variable, asi unogona kushandisa underscore () kubatanidza ma _words kuita one sezvambotaurwa

💡 MANYORERO EKULEFT SIDE ANOITA

hembeYandinofarira = "ndeye red"

```
HembeYandinofarira = "ndeye red"
```

```
hembe_yandinofarira = "ndeye red"
```

➊ NGATICHITARISA KU RIGHT KWE EQUAL SIGN (=)

Chekutanga, unoona kuti pane ma *quotes* (""). Zvinhu zvese zviri mu ma *quotes* zvinoverengwa ne *computer* se chinhu chimwe chete, semashoko, uye zvinoverengwa **sezvazviri**. Ukasaisa ma *quotes* ukati *hembeYandinofarira = ndeye red*, *computer* ichatarisa kuti chinhu chiri *kuright kwe equal sign (=)* ichiedza kuda kuona kuti:

1. i *nhamba* here? - **haisi**
2. imwe *code* ine zvainoreva zvinozivikanwa ne *Shonascript* here? - **haisi**
| *code* ine zvainoreva iri kutaurwa apa uchazoiziva kumberi ukaramba uchiverenga

Saka kana *computer* yaona kuti ku *right* hakuna zvinhu izvi, ichaona sokuti zvese zviri *kuright i variable*. Asi ku *right* kune 2 mashoko aisira muma *quotes*, saka ichaona kunge urikuda kunyora 2 ma *variables* panguva imwe chete yokuudza kuti *manyorero awita haasiriwo*. Asi kana *kuright* kwacho kuine *word* rimwe chete, sokuti *hembeYandinofarira = red*, *computer* ichaona kuti waisa *variable* ku *right*, yoedza kutsvaga kuti *variable* inonzi *red* yambogadzirwa here mu *code* yako.

Kugadzira variable kuita sei?



Kugadzira variable ndiko kuti *zitaReVariable = "zvimwe zvinhu"* zvakafanana nekuti *hambeYandinofarira = "ndeye red"*. Apa panenge pachigadzirwa *variable* inonzi *hembeYandinofarira*

Kana *computer* ikashaya *variable* inonzi *red* yairi kutsvaga, inonyora kuti *variable inonzi red haisi kuzivikanwa*.

Unoona sei kuti variable yako yadzirwa?

➊ KUNYORA UCHISHANDISA NYORA()

Pane anonzi ma *functions*, auchazoziva pauchaverenga nezve *topic yema functions*. Munhu anoshandisa ma *functions* kana achida kutuma `computer` kuti iite `basa`. `Shonascript` ine *function* inoita `basa` rekunyora zvaukuda kuona inonzi `nyora()`. Enda kumberi kana uchida kuona kuti `nyora()` anoshanda sei. Izvi zvichakubatsira kunzwisia mashandiro ema `variables`.

 [Edit this page](#)

Nyora

⚠ NOT REVISED YET

Nyora Chii?

Nyora i `function` yaunotuma kuita `basa` rekunyora zvinhu mu `terminal`. Unozonzwisa zvema `function` kana waverenga nezvawo kumberi, asi panguva ino chimbongoziva kuti ma `function` anoita `basa` raanenge atumwa.

Mashandisirwo a `nyora()`

Image here

Image here

Chii chikuitika apa?!

Nyora anotumwa zvekunyora zvacho zviri muma brackets `()`. Tichatarisa `line` rimwe ne rimwe tichiedza kunzwisia kuti zvii zvikuitika. Ma `line` atiri kutaura ndiwo ariku `left` mu `picture` iri pamusoro apa

❗ TSANANGURO

Line 1

```
nyora("Hesi")
```

Apa `nyora()` apihwa mashoko ekunyora, mashoko acho ndi "Hesi". "Hesi" apa anotariswa ne `computer` semashoko nekuti akaiswa mumaquotes "". Kana computer ichinge yatumwa kunyora mashoko, inongonyora mashoko sezvaari. Saka Ukateedzera ma steps aya wega:

💡 ITA

1. mu file rakanzi `index.shona`, nyora kuti `nyora("Hesi")`
2. mu `terminal` nyora kuti `node shona.js`, wobaya `enter`
3. mu `terminal` zvekare, nyora kuti `node index.js`, wobaya `enter`

Ukaita masteps aya zvakanaka, unofana kuona muterminal makanyorwa kuti

Hesi

Kana ukaona izvi, wagona kushandisa `nyora()`

❗ TSANANGURO

Line 2

`nyora(2021)`

Apa nyora apihwa `nhamba` yekunyora. `Nhamba` yacho ndi `2021`.

Computer inozvinona sei kuti inhamba? Ko sei usina kuisa
ma quotes kuti `nyora("2021")`?



Computer inozviona kuti i `nhamba` kana iri `nhamba` chaiyo isina kuiswa muma quotes!!!.

Uchazonzwisa tsananguro yema quotes ukaramba uchiverenga. Panguva ino dzokorora ma **steps 3** ambotaurwa mu *box re green* pamusoro pana **Ita**, asi nyora kuti `nyora(2021)` panzvimbo ya `nyora("Hesi")`. Unofana kuona mu `terminal` makanz:

2021

Line 4 na Line 5

```
zitaRangu = "Panashe"  
nyora(zitaRangu)
```

Apa tatanga nekugadzira **variable**. Kana usati waakunzwisa kuti **variable** chii, unogona kuverenga nezvawo kumashure kune *topic* yema **variable**. **Variable** yagadzirwa apa ndi **zitaRangu**, ichibva yanzi ndi "**Panashe**". Unogona kubvisa pakanzi "**Panashe**", oisa zita rako riri muma *quotes*. Usasiye *maquotes*, nekuti hazvishande.

Izvi zvinoreva kuti tikazotuma **computer** kunotsvaga **variable** inonzi **zitaRangu**, inofana kudzoka na "**Panashe**". Saka pa **line 5**, takuudza **computer** kuti **nyora(zitaRangu)**, ichaona kuti **nyora()** uye apihwa zvekunyora, asi zvekunyora zvacho hazvisi kuma *quotes*, saka haasi **mashoko**. **Computer** ichatarisa kuti kana asiri **mashoko**, saka i **nhamba** here? **Kwete**.

Saka zvaakureva kuti nyora apihwa **variable**. **Variable** ichatsvagwa kumashure kuti wamboigadzira here. Saka apa, hongu, waigadzira **zitaRangu = "Panashe"** pa **line 4**. Ukaita ma **steps 3** aye ari mu *box* rakanzi **Ita** pamusoro apa, unofana kuona mu **terminal** makanzi:

Panashe

Bvisa pakanzi "**Panashe**" uise zita rako 😅

Line 7

Sekutsanangurwa kwaitwa pana **line 4** na **line 5**, apa **nyora()** apihwa zvekunyora, asi zvekunyora zvacho i **variable**. **Computer** ichatsvaga **variable** inonzi **zitaRake** kumusoro kwe **code** yako, yobva yaishaya. Saka ukada kudzokorora ma **steps 3** aye ekumashure uku, uchona kuti pauchanyora mu terminal kuti **node shona.js**, uchanzi:

Paita problem, `zitaRake` haasi kuzivikanwa paline 7

Zvinobvumidzwa muna **nyora()**

Saka zvii zvinobvumidzwa muma *bracket* a **nyora()**.

 **ZVINOBVUMIDZWA MUMA BRACKETS**

1. mashoko

- zvinhu zvese zvaiswa muma *quotes* chero zvingareve chinhu zvinotariswa ne **computer** se **mashoko** aka zvinongonyorwa zvakadaro

2. nhamba

- nhamba inonyorwa iri *one*. Kuti **nyora(20 21)** hazviite nekuti 20 na 21 atove ma **nhamba** akasiyana ari 2. Uchazoona pazasi kuti kana uchida kunyora zvinhu zvakawanda uye zvakasiyana siyana muma brackets a **nyora()** unoita sei

3. ma **variables**

- kana usati waakunzwisia kuti ma variables chii, enda kumashure kune *topic* yema **variables** kuti ugonzwisia

Kupa **nyora()** zvakawanda

Ko kana uchida kuti nyora() anyore zvakawanda, unoita sei?



Kunyora zvakawanda kватiri kutaura apa ndiko kutuma **nyora()** kuti anyore zvakawana panguva imwe chete. Ngatimboti iwewe ukuda kuti **nyora()** anyore ma **nhamba** 2. Manhamba acho ndi 2021 na 2022, unonyora sei?

Image here

Image here

Chii chikuitika apa? 🤔

Kana uchida kuti `nyora()` anyore zvakawanda, unoisa ma `comma`, pakati pezvinhu zvacho zvaukuda kuti anyore;

Line 1

`nyora(2021,2022)`

Apa, `nyora()` apihwa zvinhu 2; `nhamba` 2021 na `nhamba` 2022. Pakati pema `nhamba` aya pane ma `comma`, zvichireva kuti ukuudza `computer` kuti `2021` na `2022` ma `nhamba` akasiyana.

Ukasaisa `comma`, Ukanyora kuti

`nyora(2021 2022)`

`Computer` ichatadza kunzwisia kuti `2021 2022` chii, nekuti haisi `nhamba`, `mashoko`, kana `variable`. Saka ichakuudza kuti `paita problem`

Line 2 na Line 3

Apa tatanga nekugadzira `variable` inonzi `zitaRangu`. Saka pa `line 5`, ukupa `nyora()` zvinhu 2:

1. `mashoko` ekuti "`Inini ndinonzi "`"
2. `variable` inonzi `zitaRangu`. Ukaita ma **steps 3** aye ekumashure emu `terminal`, unoona mu `terminal` makanzi:

`Inini ndinonzi Panashe`

Tumira message kuwhatsapp kana ku facebook kana uchida kubatsirwa.

 Edit this page

Enzaniso

Enzaniso chii?

⚠ NOT YET REVISED

Enzaniso dzinoshandisa kana uchida ku enzanisa ma variables 2. Ngatomboti une 2 ma variables awagadzira kare variableYekutanga na variableYechipiri. Kana uchishandisa enzaniso, unenge uchitora variable yekutanga, oienzanisa ne imwe variable. Pane enzaniso dzemhando 3.

Apa, unogona kutora variableYekutanga uchida kuona zvinhu 3 izvi:

!(1) MHANDO YEENZANISO

1. Yakafanana na variableYechipiri here?
2. Idiki pane variableYechipiri here?
3. Ihombe kudarika/kupfuura variableYechipiri here?

Mashandisirwo e enzaniso

Mashandisirwo chaiwo e enzaniso uchazomaoona kana waverenga *topic* ye Kana, Zvimwe. Asi panguva ino unogona kumboona zvinoitika panenge pachishandisa enzaniso.

Image here

Chii chikuitika apa?!

! TSANANGURO

Line 1 na Line 2

```
variableYekutanga = 5  
variableYechipiri = 6
```

Tatanga nekugadzira ma variable 2: variableYekutanga na variableYechipiri. Ndiwo ma variable atiri kuda kuzoenzanisa

Line 4 na Line 5

```
zvakafananaHere = variableYekutanga yakafanana na variableYechipiri  
nyora(zvakafananaHere)
```

Apa tiri kuda kuona kuti variableYekutanga yakafanana na variableYechipiri here, saka tashandisa yakafanana na. Ukaenzanisa ma variable aya, unofana kuona kuti akaenzana here kana kuti kwete.

ko nyora() arikutsvagei pa line 5



pa line 4 tanga tichienzanisa variableYekutanga na variableYechipiri, pakuenzanisa kwatiri kuita, tinogona kuona kuti ichokwadi kana kuti kunyepa. Kuti iwewe ugone kuzoona kuti chii chaitiki pataenzanisa, uchashandisa nyora().

Tagadzira variable inonzi zvakafananaHere tichibva taita kuti variable iyoyo iite zvinhu zvichabuda pakuenzanisa ma variableYekutanga na variableYechipiri. Tinoita izvi nekuti tikuda kuzonyora variable iyoyo tione kuti chii chaitika pataenzanisa.

💡 ITA

1. mu file rakanzi `index.shona` nyora:

```
variableYekutanga = 5
variableYechipiri = 6
zvakafananaHere = variableYekutanga akafanana na variableYechipiri
nyora(zvakafananaHere)
```

2. mu `terminal` nyora kuti `node shona.js`, wobaya `enter`

3. mu `terminal` zvekare, nyora kuti `node index.js`, wobaya `enter`

Ukaita masteps aya zvakanaka, unofana kuona mu terminal makanzi

`false`

Zvichireva kuti `kunyepa`. Ukatarisawo `variableYekutanga` ndi 5, na `variableYechipiri` ndi 6 havana kuenzana saka zvechokwadi kuti *5 akafanana na 6 kunyepa*.

❗ TSANANGURO

Line 7 na Line 8

Matsanangurirwo aitwa pa **line 4 na line 5** akafanana ne matsanangurirwo epa **line 7 na line 8**. Asi changochinja ndecekuti tiri kuda kuona kuti `variableYekutanga` idiki here pana `variableYechipiri`. Ukadzokorora **masteps 3** arimu *box re green* rakanzi **Ita**, unofana kuona mu `terminal` makanzi:

`true`

`true` zvireva kuti `ichokwadi`. Zvechokwadiwo `variableYekutanga(5)`, idiki pane `variableYechipiri(6)`

Line 10 na Line 11

Matsanangurirwo aitwa pa **line 4 na line 5** akafanana ne matsanangurirwo epa **line 7 na line 8**. Asi changochinja ndecekuti tiri kuda kuona kuti `variableYekutanga` ihombe here pana

`variableYechipiri`. Ukadzokorora **maстепs 3** arimu *box re green* rakanzi **Ita**, unofana kuona mu `terminal` makanazi:

`false`

`False` zvireva kuti kunyepa. Zvechokwadi `variableYekutanga`(5), haasi muhombe pane `variableYechipiri` (6)

Enzaniso dzinoshandisa pakawanda wanda sezvauchazoona ukaramba uchiverenga

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Kana, Zvimwe

 NOT REVISED YET

Kana/Zvimwe chii?

Pane dzimwe nguva dzekuti iwewe unogona kuda kuudza computer kuti itarise uye ishandise chidimbu che code mushure mekunge kana chimwe chinhu chiri chokwadi, ndopanoshanda kana. Kana chinhu ichocco chisiri chokwadi, unenge uchiudza kuudza computer kuti ishandise imwe code isiri muma brackets a kana. Code iyoyo inozoshandisa inoiswa muma brackets a zvime

Kuti ugonzwisia zvatiri kutaura pano, tichashandisa zvinhu izvi:

ZVATICASHANDISA NA KANA/ZVIMWE

1. ma variable
2. enzaniso
3. nyora()

Kana usina kunzwisia kuti ma variables ne enzaniso chii, unokurudzirwa kuverenga ma topic iwayo zvekare, uyezve unogona kubvunza mu group re whatsapp kuti ubatsirike

Mashandisirwo a Kana na Zvimwe

Unoshanda kuzvitupa

WAPIHWA BASA KUZVITUPA (NATIONAL IDS)

Ngatimboti iwewe unoshanda kuzvitupa mu Zimbabwe. Mu Zimbabwe, munhu anobvumidzwa kutora chitupa kana achinge asvitsa makore 16. Ngatomboti iwewe basa rako nderekubvunza makore emunhu

aya kuzotora chitupa. Kana munhu akati ane makore 16 zvichienda mberi, uchamuudza kuti aende ku office kunotora chitupa, zvimwe uchamuudza kuti anozodzoka kana aane makore 16.

Iwewe semunhu aakugona kushandisa ShonaScript, ukuda kuita kuti munhu auya kuzotora chitupa audzwe zvekuita ne computer. Saka uchanyora code inoita izvi uchitedzera masteps ari pazasi apa.

(i) RONGA

Step 1 : Kugadzira ma variables

Tiri kuda kuzoenzanisa zvinhu 2 izvi:

1. makore anobvumidzwa kuti munhu atore chitupa mu Zimbabwe
2. makore emunhu auya kuzotora chitupa

Saka zwawaona kuti tichada kuzoshandisa enzaniso, zvaakureva kuti tikufana kugadzira ma variables 2 aya:

1. makoreAnobvumidzwa
 - Ndiyo variable yemakore anobvumidzwa kuti munhu atore chitupa (16 years)
2. makoreEMunhu
 - Ndiyo variable yemakore e munhu auya kuzotora chitupa. Pakutanga apa ngatimboti makore emunhu auya kuzotora chitupa nhasi ane makore 15

Zvatapedza kuronga pa step 1, chinyora code yacho seizvi:

💡 ITA

1. Pa line 1 mu index.shona, nyora kuti

```
makoreAnobvumidzwa = 16
```

2. Pa line 2 mu index.shona, nyora kuti

```
makoreEMunhu = 15
```

se izvi:

Image here

Ma nhamba ariku left ayo ndiwo ma nhamba emaline aunoona mu VS Code

🔥 USANYORE SE IZVI

Usagadzire variable yako uchiti: makoreAnobvumidzwa = 16 years

Izvi hazviite nekuti ukadzokora kunoverenga nezve ma variables, uchaona kuti computer ichatarisa ku *right side kwe equal sign (=)* yobva yaona kuina 16 years. Zvichaitika ndeizvi:

1. 16 years haasi muma quotes, saka haasi mashoko.
2. 16 years haisi nhamba nekuti pane 16 na years
3. 16 years achaonekwa kunge variable, computer ichakuudza kuti manyorero awaita variable iyoyo haasiriwo

Iwewe wanga ukuda kuenzanisa makore, saka makore i nhamba, zvichireva kuti paunogadzira ma variable ako, unofana kuisa nhamba ku *right side kwe equal sign*.

Step 2: Kushandisa enzaniso na kana na zvimwe

💡 ITA

1. Pa line 4 mu index.shona, nyora kuti:

```
kana makoreEMunhu iridiki pane makoreAnobvumidzwa {
```

2. pa line 5 mu index.shona, nyora kuti:

```
nyora("Uchiri mudiki, unozodzoka waane makore 16")
```

3. pa **line 6** mu **index.shona**, nyora kuti:

```
} zvimwe {
```

4. pa **line 7** mu **index.shona**, nyora kuti:

```
nyora("Enda ku Office kunotora chitupa")
```

5. pa **line 8** mu **index.shona**, nyora kuti:

```
}
```

se izvi:

Image here

Hausi wavyora shona here apa?



Kana enzaniso iyo iri `chokwadi`, tikuda kuti computer ishandise `code` iri muma *curly brackets* {} ekutanga. Asi `kana` `enzaniso` isiri `chokwadi` tikuda kuti `computer` ishandise `code` iri muma *curly bracket* echipiri anoteera `zvimwe`.

Tatyora Shona here?

`Computer` inonzwisia kuti `makoreEmunhu` na `makoreAnobvumidzwa` ma `variables`. Saka `computer` ichaverenga ichiti `kana` `variable` inonzi `makoreEMunhu` `iridiki` `pane` `variable` inonzi `makoreAnobvumidzwa`

Kana wapedza kunyora code yako, chiona kuti mu `terminal` munonyorwa kuti chii. Zvekare kuti unoita izvi kana uchida kuti `code` yako isande

💡 ITA

1. mu `index.shona`, nyora `code` iri mu *picture*
2. mu `terminal` nyora kuti `node shona.js`, wobaya `enter`
3. mu `terminal` zvekare, nyora kuti `node index.js`, wobaya `enter`

Ukaita izvi zvakanaka, unofana kuona mu `terminal` makanyorwa kuti:

Uchiri mudiki unozodzoka waane makore 16

Zvechokwadiwo `makoreEMunhu` anga ari 15 zvichireva kuti haasi aakukwanisa kutora chitupa.

💡 ITA

Chiisa makore akawanda kudarika 16

1. mu `index.shona`, uchinje makoreEMunhu kuti aite 18 se izvi:

```
makoreEMunhu = 18
```

2. mu `terminal` nyora kuti `node shona.js`, wobaya `enter`
3. mu `terminal` zvekare, nyora kuti `node index.js`, wobaya `enter`

Ikozvino unofana kuona mu `terminal` makanzi:

Enda ku Office kunotora chitupa

 Edit this page

Ma list

 NOT REVISED YET

Ma list chii?

Kana iwewe uchida kuenda kunotenga zvinhu zvakawanda, unogona kunyora zvinhu zvaukuda kunotenga pa pepa kana mu **phone**. Kana uchinge waita izvi, tinoti wanyora **list** rezvaukuda kunotenga.

Ko computer inoona sei list



Manyorerwo e list

Computer inoziva kuti wanyora **list** kana ukanyora ma **square brackets** se izvi:

```
["Muvhuro", "Chipiri", "Chitatu"]
```

TSANANGURO

Apa ndagadzira **list** re mazuva 3 kubva pana Muvhuro kusvika pana Chitatu. Mu **list** randagadzira iri, mune zvinhu 3. zvinhu izvi zvandaisa mu **list** aya mashoko ane ma **quotes** akapatsanurwa ne ma **comma**.

ZVINOBVUMIDZWA MU LIST?

1. **Mashoko** ane ma **quotes**
 - sokuti: **["Muvhuro", "Chipiri", "Chitatu"]**

2. Ma nhamba

- sokuti: [2020, 2021, 2022]

3. Ma variables

- sokuti:

```
muvhuro = "Muvhuro"  
chipiri = "Chipiri"  
chitatu = "Chitatu"
```

```
[muvhuro, chipiri, chitatu]
```

- Ukatarisa apa, ndaisa ma variable mu list, asi ndatanga ndamagadzira ma variable iwayo se mashoko zvakanaka. Kana usina kuzvinzwisisa izvi, unofana kudzokera kunoverenga nezve ma variables kumashure kune topic yema variables kuti zvii zvikuitika.

Mashandisirwo e list

Kazhinji munhu anogadzira list achida kuzorishandisa. Anogona kuda kudzima zvinhu mu list imomo, kana kuwedzera zvimwe zvinhu. Kuti ugone kuzoshandisa list raunenge wagadzira, unofana kuripa zita. Unopa list zita kunge uri kugadzira variable. Ngatimboti list randagadzira kumashure ["Muvhuro", "Chipiri", "Chitatu"] waakuda kuripa zita rekuti mazuva, unoita se izvi

```
mazuva = ["Muvhuro", "Chipiri", "Chitatu"]
```

🔥 ZITA RE LIST

Zita re list rinonyorwa semagadzirirwo evariable. Manyorero anoita ndeaya:

1. Zita ngariite shoko rimwe chete rakabatanidzwa

- sokuti listRangu
- usati list Rangu, nekuti aya mashoko maviri

2. Zita ngarisaite nhamba

- sokuti 2021 = ["Muvhuro", "Chipiri", "Chitatu"]

Muenzaniso: Vanhu mu kombi

Ngatimboti iwewe uri hwindi akarongeka we kombi, arikukwidza vanhu mukombi asi achinyora `list` remazita evanhu vapinda mukombi. Ngatimboti panguva ino mukombi maane vanhu 5, zita re `list` rako rinonzi `vanhuMukombi`.



1. mu `index.shona` pa `line 1`, nyora kuti:

```
vanhuMukombi = ["Panashe", "Tanaka", "Kudzai", "Kupa", "Vimbai"]
```

2. mu `index.shona` pa `line 2`, nyora kuti:

```
nyora(vanhuMukombi)
```

3. mu `terminal`, nyora kuti: `node shona.js` wobaya `enter`

4. mu `terminal`, nyora kuti: `node index.js` wobaya `enter`

Kana ukaita zivi zvakanaka, unofana kuona muterminal makanzi

```
["Panashe", "Tanaka", "Kudzai", "Kupa", "Vimbai"]
```

Izvi zvinoitika nekuti wagadzira list re `vanhuMukombi` zvakanaka, wobva wazoudza `computer` kuti inyore list iri ichishandisa `nyora(vanhuMukombi)`

Kuverenga zvinhu zviri mu `list`

Kana uchida kuziva kuti mu `list` rako mune zvinhu zvingani, unoshandisa `.zvingani()`, `.vangani()`, kana `.mangani()`, se izvi:

```
vanhuMukombi.vangani()
```

Image here

Image here

💡 ITA

1. nyora `code` iyi mu `index.shona`
2. mu `terminal`, nyora kuti: `node shona.js` wobaya `enter`
3. mu `terminal`, nyora kuti: `node index.js` wobaya `enter`

Ukaita izvi zvakanaka, unofana kuona mu `terminal` makanyorwa `nhamba` yezvinhu zviri mu `vanhuMukombi` kuti:

5

❗ TSANANGURO

Pa `Line 2`:

- tashandisa `.vangani()` pane `vanhuMukombi` kuti tiwane `nhamba` yevantu vari mu `list` rako
- tobva tagadzira variable inonzi `x`.
 - Tagadzira variable iyi nekuti tikuda kuzoinyora mu `terminal` tichishandisa `nyora()`

Kuisa zvinhu mu list

"Ruvarashe" auya kuzopinda mukombi, iwewe sa hwindi waakufana kuisa zita rake mu `list` rawagadzira kare rionzi `vanhuMukombi`. Tarisa pazasi kuti uonoita sei izvi:

ITA: "RUVARASHE" MU LIST

1. mu `index.shona` pa `line 3` nyora kuti:

```
isa "Ruvarashe" mu vanhuMukombi
```

Kana kuti unogona kunyora:

1. mu `index.shona` pa `line 3` nyora kuti:

```
vanhuMukombi.isa("Ruvarashe")
```

2. mu `index.shona` pa `line 4`, nyora kuti:

```
nyora(vanhuMukombi)
```

3. mu `terminal`, nyora kuti: `node shona.js` wobaya `enter`

4. mu `terminal`, nyora kuti: `node index.js` wobaya `enter`

ukaita izvi zvakanaka, unofana kuona mu `terminal` makanzi:

```
["Panashe", "Tanaka", "Kudzai", "Kupa", "Vimbai", "Ruvarashe"]
```

Zvichireva kuti taisa zita ra "Ruvarashe" mu `list` redu zvakanaka, saka mukombi maane vanhu 6

Image here

Image here

Ukateedzera zviri mu *picture* iyi, unofana kuona mu `terminal` makanzi

```
["Panashe", "Tanaka", "Kudzai", "Kupa", "Vimbai"]
["Panashe", "Tanaka", "Kudzai", "Kupa", "Vimbai", "Ruvarashe", "Tatenda"]
```

! TSANANGURO

Izvi zvinoitika nekuti `nyora()` atumwa ka 2 kunyora mu `terminal`:

1. Atumwa kunyora usati waisa `"Ruvarashe"` na `"Tatenda"` mu `list`, saka pekutanga `nyora` anongonyora list riine vanhu 5 chete
2. Pazotumwa `nyora` pa `line 5`, `"Ruvarashe"` na `"Tatenda"` vanga vaiswa mu `list`, saka `nyora` anobva anyora vanhu vese vari 7 kusanganisira `"Tatenda"` na `"Ruvarashe"`

Kubvisa zvinhu mu list

`"Kudzai"` asvika kwaanga achienda ne kombi, saka aakuburuka. Iwewe sa hwindi akarongeka, chibvisa zita rake kubva mu `list` rako riye. Tarisa pazasi kuti uone unoita sei

💡 ITA: BVISA "KUDZAI" KUBVA MU LIST

1. mu `index.shona` pa `line 6` nyora kuti:

```
bvisa "Kudzai" mu vanhuMukombi
```

Kana kuti unogona kunyora:

1. mu `index.shona` pa `line 6` nyora kuti:

```
vanhuMukombi.bvisa("Kudzai")
```

2. mu `index.shona` pa `line 7`, nyora kuti:

nyora(vanhuMukombi)

3. mu terminal, nyora kuti: node shona.js wobaya enter

4. mu terminal, nyora kuti: node index.js wobaya enter

Image here

Image here

Ukaita izvi zvakanaka, unofana kuona mu terminal kuti:

```
["Panashe", "Tanaka", "Kudzai", "Kupa", "Vimbai"]
["Panashe", "Tanaka", "Kudzai", "Kupa", "Vimbai", "Ruvarashe", "Tatenda"]
["Panashe", "Tanaka", "Kupa", "Vimbai", "Ruvarashe", "Tatenda"]
```

⚠ TSANANGURO

1. nyora(vanhuMukombi) wepa line 2 ndiyе anyora kuti:

```
["Panashe", "Tanaka", "Kudzai", "Kupa", "Vimbai"]
```

- Apa hatisati taisa vanhu mukombi

2. nyora(vanhuMukombi) wepa line 5 ndiyе anyora kuti:

```
["Panashe", "Tanaka", "Kudzai", "Kupa", "Vimbai", "Ruvarashe", "Tatenda"]
```

- Apa tanga taisa "Ruvarashe" na "Tatenda" mu list pa **line 3** na **line 4**. Taane vanhu 7
3. nyora(vanhuMukombi) wepa **line 7** ndiye anyora kuti:
- ```
["Panashe", "Tanaka", "Kupa", "Vimbai", "Ruvarashe", "Tatenda"]
```
- Apa tanga tabvisa "Kudzai" kubva mu list pa **line 6**. Tasara ne vanhu 6

## Kutora chinhu kubva mu **list**

Vanhu vari mukombi yako iyi vakagara pamasiti emukombi. Masiti aya ane ma **nhamba**. Vanhu vanowanzotangira kuverenga ma **nhamba** pana **1**, asi **computer** inotangira pana **0** nguva dzese

### COMPUTER INOTANGIRA PANA **ZERO**

Izvi zvakakosha kunzwisia

Iwewe zvawaane vanhu 6 mukombi, uchatu vanhu 6 ava vakagara pa masiti 6. Tarisa **list** rako iri:

```
vanhuMukombi = ["Panashe", "Tanaka", "Kupa", "Vimbai", "Ruvarashe", "Tatenda"]
```

### **!** IWEWE UNOVERENGA MASITI EVANHU SEIZVI

- "Panashe" aripasiti **1**
- "Tanaka" aripasiti **2**
- "Kupa" aripasiti **3**
- "Vimbai" aripasiti **4**
- "Ruvarashe" aripasiti **5**
- "Tatenda" aripasiti **6**

Asi **computer** ichatangira pana **zero** kwete pana **1** seizedvi:

### **!** COMPUTER INOVERENGA MASITI EVANHU SEIZVI

- "Panashe" aripasiti **vanhuMukombi[0]**
  - zvichireva kuti aripasiti rechi **zero**

- "Tanaka" aripasiti vanhuMukombi[1]
- "Kupa" aripasiti vanhuMukombi[2]
- "Vmbai" aripasiti vanhuMukombi[3]
- "Ruvarashe" aripasiti vanhuMukombi[4]
- "Tatenda" aripasiti vanhuMukombi[5] Aya ndiwo matarisiro anoita computer zvinhu zviri mu list. Unogona kutora chinhu mu list ogadzira variable kuti uone kuti chii chinoitika

### ITA

1. mu index.shona, pazasi pe code yawambonyora, nyora kuti

```
munhu = vanhuMukombi[1]
nyora(munhu)
```

2. mu terminal, nyora kuti: node shona.js wobaya enter

3. mu terminal, nyora kuti: node index.js wobaya enter

Ukaita izvi zvakanaka, uchaona kuti nyora() wekupedzisira anonyora chinhu chiri pa nhamba 2 mu list rako, kwete pekutanga, nekuti chinhu chekutanga chiri pa nhamba 0 kwete 1

## Kupinda mu list

Iwewe sa hwindi ane hunhu, ukuda kumhoresa munhu mumwe nemumwe arimukombi yako nezita rake nekuti unoziva mazita avo. Unoita sei? Tichaedza kuita izvi nenzira 2, asi wega uchazviona kuti ndezvipi zvirinani.

### NZIRA YEKUTANGA: SHANDISA NYORA PANE MU WESE ARI MULIST

1. mu index.shona dzima maline ese osiya line rekutanga rakanzi:

```
vanhuMukombi = ["Panashe", "Tanaka", "Kudzai", "Kupa", "Vimbai"]
```

chinyora pa line 2 kuti:

```
nyora("Hesi Panashe")
```

enda pa `line 3` onyora kuti:

```
nyora("Hesi Tanaka")
```

enda pane `line` riri kutevera uchidzokorora kumhoresa munhu arimo sezvaitwa pa `line 2` na `line 3`, upedzisire pane `line 6`. Tarisa *picture* iri pazasi kuti uone maitirwo azvo

```
nyora("Vimbai")
```

Image here

Image here

Ko kana mu list mangu muine vanhu 1000?



Kana mu list mako muine vanhu 1000, zvinoreva kuti kana uchida kuvamhoresa vese nenzira iyi, uchanyora ma `line 1000` mu `index.shona` uchimhoresa munhu mumwe ne mumwe.

Ma `line 1000` aya akawandisa, hapana here imwe nzira inoita kuti tinyore ma `line mashoma` mu code yedu?



## (!) NZIRA YECHIPIRI: KUPINDA MU LIST

Kunonzi kupinda mu list, zvinoreva kuti tanga pane chinhu chekutanga mu list otuma computer kuita zvauri kuda, oenda pane chechipiri, zvichingodaro kusvika pane chekupedzisira.

Tiri kuda kutuma computer kupinda mulist. Unopinda sei? Chimbatarisa manyorero ataita pazasi:

Image here

Image here

## Chii chikuitika pa line 2?

### ! TSANANGURO: KUPINDA MU LIST

Tiri kuti pane \_\_\_ mu \_\_\_. Apa tine 2 ma \_\_\_

1. \_\_\_ wekutanga anomirira variable inopinda mu list
  - variable inopinda mu list inonyorwa semanyorerwo anoitwa ma variables akataurwa mu topic yema variables. Asi apa kutongonyora variable yekuti munhu ndiko kutoigadzira kwacho, saka computer inonzwisia kuti apa wagadzira variable ichapinda mu list rako
2. \_\_\_ wechipiri anomirira zita re list rako raukuda kupinda mariri
3. Ma curly brackets {} anoudza computer kuti kana yapinda mulist, ishandise code irimo muma curly brackets aya

## Ko pana Line 3?

Line 3 arimuma curly brackets saka zvinoreva kuti computer ichasandisa code iyi kana ichinge yapinda mu list rako re vanhuMukombi.

```
nyora("Hesi ", munhu)
```

Apa `nyora()` apihwa zvekunyora zviri 2: "Hesi " na `munhu`.

1. "Hesi " arimuma `quotes`, zvichireva kuti `mashoko` saka `computer` inonzwisia kuti "Hesi " achanyorwa mu `terminal` sezvaari
  2. `munhu` haasi mu ma `quotes`, zvichireva kuti haasi `mashoko`, uye haisi `nhamba`, saka `computer` inonzwisia kuti `munhu` i `variable`
- `computer` ichatsvaga kuti `variable` inonzi `munhu` inopinda mu `list` yambogadzirwa here? Hongu, yagadzirwa pa `line 3`

### Kana `computer` yapinda mu `list`

Kana `computer` yapinda mu `list` rako, inotanga pane chinhu chekutanga mulist rako. Saka apa inotanga pana "`Panashe`". Kana `computer` iri pana "`Panashe`", `variable` inonzi `munhu` ichachinja kuita "`Panashe`".

`munhu = "Panashe"`

Computer paichashandisa `line 3`

```
nyora("Hesi ", munhu)
```

Apa `munhu` ndi "`Panashe`", saka mu `terminal` muchanyorawa kuti `Hesi Panashe`.

Kana `computer` yapedza kushandisa code iri muma *curly brackets* {} pana "`Panashe`", ichaenda pane chinhu chiri kutevera mu `list` rako yoita sevayaita pana "`Panashe`". Saka variable `munhu` ichachinja kuita `munhu = "Tanaka"` yonyora `nyora("Hesi ", munhu)`, zvichingodaro kusvika yapedza nevanhu vese vari mulist rako

## Kutsvaga chinhu mu `list`

Unogona kutsvaga chinhu mu `list` uchishandisa `.muna()`, kana kuti `irimu`. Ngatimboti iwewe ukuda kutsvaga kuti "Kudzai" arimu kombi here pa `list` rako, unoita seizvi:

Image here

Image here

## !( CHII CHIKUITIKA APA?

Pa **line 3** na **line 4**

```
arimoHere = vanhuMukombi.muna(munhuAkutsvagwa)
arimoHere = munhuAkutsvagwa irimu vanhuMukombi
```

Zvikuitika apa zvakangofanana, pa **line 2**, tagadzira **variable** ye **munhuAkutsvagwa**, tobva tati ndi **"Kudzai"**.

Pa **line 3**, tiri kuudza **computer** kuti tarisa mu **vanhuMukombi** kuti **munhuAkutsvagwa** here, **variable** inonzi **"Kudzai"** agadzirwa pa **line 2**

Pa **line 4**, tangoita zvakafanana nepa **line 3**, asi tikuudza **computer** kuti tarisa **variable** inonzi **munhuAkutsvagwa** kuti **irimu** **vanhuMukombi** here. Iwewe unoshandisa line 3 kana line 4, zvchienderana nezwawanzwisia

## 💡 ITA

Nyora **code** iyoyi mu **index.shona**, wochiita izvi:

1. mu **terminal**, nyora kuti: **node shona.js** wobaya **enter**
2. mu **terminal**, nyora kuti: **node index.js** wobaya **enter**

Ukaita izvi zvakanaka, unofana kuona mu **terminal** makanzi:

true

true zvinoreva kuti chokwadi, zvechokwadiwo "Kudzai" arimo mu vanhuMukombi.

### DANGER

Chimboedza kuchinja pana munhuAkutsvagwa = "Kudzai", woisa munhuAkutsvagwa = "Kudzi". Wodzokora zvawaita pamusoro apa. Unofana kuona mu terminal makanzi:

false

false zvinoreva kuti kunyepa

## Kujamba chinhu mu list

Ngatimboti iwewe sa hwindi wakavenga "Kupa", saka ukuda kuti ukasvika pana "Kupa" mu list, orega kumumhoresa, ongonyarara. Unoita sei? Pane nzira 2 dzekuita izvi

 NZIRA1: UNOSHANDISA KANA, ENZANISO, NA JAMBA

Image here

Image here

Chii chikuitika apa? 😠

 TSANANGURO

Line 1 Iri ndiro list rako riye revanhu vari mukombi

## Line 2

```
munhuWandakavenga = "Kupa"
```

Apa tagadzira **variable** inonzi **munhuWandakavenga**, tobva tati variable iyoyo ndi **"Kupa"**.

## Line 3

```
pane munhu mu vanhuMukombi {
```

Apa tikupinda mu **list** redu riye sezvatamboita kumashure.

## Line 4

```
kana munhu yakafanana na munhuWandakavenga {
```

Apa tatove mu **list** kare, saka tine **variable** inonzi **munhu**, ichange ichichinja patinenge tichifamba kubva pane chinhu chekutanga mu **list** kusvika pane chekupedzisira. Tiri kuudza **computer** kuti kana **variable** **munhu** yachinja kuita **munhu = "Kupa"**, inobva **yafanana na munhuWandakavenga**. Kana izvi zvichinge zvaitika, **computer** inofana ku **jamba** munhu iyeye.

Ku **jamba** apa zvinoreva kuti **computer** icharega kushandisa **code** yese ichatevera kumberi kwa **jamba** mumabrackets a **kana**, yobva yaenda pane munhu arikutevera mu **list**



Nyora **code** iyoyi mu **index.shona**, wochiita izvi:

1. mu **terminal**, nyora kuti: **node shona.js** wobaya **enter**
2. mu **terminal**, nyora kuti: **node index.js** wobaya **enter**

Ukaita masteps aya zvakanaka, uchaona mu **terminal** makanzi

Hesi Panashe  
Hesi Tanaka

Hesi Kudzai  
Hesi Vimbai

"Kupa" achajambwa ne computer, nekuti wakamuvenga.

### !(+) NZIRA IMWE YEKU JAMBA CHINHU MU LIST

Tinoshandisa kana, zvimwe, ne enzaniso

Image here

Image here

Chii chikuitika apa? 🍒

### !(+) TSANANGURO

Apa tashandisa kana na zvimwe, kana usina kunzwisisa kuti kana na zvimwe vanoshanda sei, unokurudzirwa kuverenga *topic* ya [Kana](#), [Zimwe](#). Unogona kubvunza pa whatsapp mugroup kuti ubatsirwe.

Tikuudza computer kuti ichinge yapinda mu list, kana variable inonzi munhu yakafanana na munhuWandakavenga, hapana zvaunoita. Hatina kuisa code muma curly brackets epana kana zvichireva kuti computer hapana zvainoita kana tikasvika pane munhuWandakavenga. Asi kana varibale inonzi munhu isina kufanana ne variable inonzi munhuWandakavenga, computer ichashandisa code iri muma brackets {} a zvimwe.

### !(+) ITA

Nyora code iyoyi mu index.shona, wochiita izvi:

1. mu terminal, nyora kuti: node shona.js wobaya enter

2. mu terminal, nyora kuti: node index.js wobaya enter

Ukaita masteps aya zvakanaka, uchaona mu terminal makanzi

Hesi Panashe

Hesi Tanaka

Hesi Kudzai

Hesi Vimbai

"Kupa" achajambwa ne computer zvekare, nekuti wakamuvenga

## Kubuda mulist

Kana computer ichinge yapinda mu list, inotangira pane chinhu chekutanga kusvika pane chinhu chekupedzisira chiri mu list imomo.

Ko kana uchida kubuda mulist usati wapedza zvinhu zvese zvirimo



Unoshandisa buda kubuda mu list. Ngatomboti iwewe ukuda kumhoresa vanhu 3 chete varimukombi yako iya, obva wanyarara hako, nekuti haudi zvekunyanya kutaura taura.

### ⓘ NGATIRONGE KUTI TICHAITA SEI?

1. Tichapinda mu list

- Apa tichashandisa code iya yekupinda mu list

2. Tichada kuverenga kuti tave pane munhu wechi 3 here

- apa tichashandisa maths, uchazoona zvedzimwe maths kumberi uku

3. Kana tave pane munhu wechi 3, tichabva tabuda mu list

- apa tichashandisa buda

Tinonyora code iyi seizevi:

Image here

Image here

## ➊ CHII CHIKUITIKA APA?

### Pa **line 2** na **line 3**

- Tagadzira **variable** inonzi **nhambaYeVanhu** pa **line 2**. **Variable** iyi i **nhamba** yatichange tichiwedzera pakoverenga vanhu tapinda mu **list**. **nhambaYeVanhu** iyi ichange ichiwedzera na **1** kana tabva pane munhu wekutanga tichienda pane munhu wechipiri, zvichingodaro.
- Tagadzira **variable** inonzi **nhambaYekubuda** pa **line 3**, bvatati **nhamba** iyi ndi 3. Tichada kuzo **enzanisa** **variable** iyi ne **variable** ye **nhambaYeVanhu** ichange ichiwedzera kubva pana 0 zvichienda mberi

### Pa **line 4**

- Apa tanyora **code** yekupinda mu **list** re **vanhuMukombi**

### Pa **line 5** na **line 6**

- Tikuda kuwedzera **nhambaYeVanhu** na **1** kana tave kufamba kubva pane chinhu chimwe ne chimwe mu **list**.
- Patinopinda mu **list**, tinotanga tiri pane munhu wekutanga, saka apa tikuudza **computer** kuti **nhambaYeVanhu** ngaiwedzere na **1** kubva pana **0**, saka yave **1**
- Pa **line 6**, tikuudza **computer** kuti **nyora()** zvinhu 3:
  - "**Hesi**" - aya mashoko anonyora wezvaari
  - munhu** - i **variable** yekupinda mu **list**, saka panonyorwa zita remunhu

iii. nhambaYeVanh - i variable ichange ichiwedzera na 1 sekufamba kwatinenge tichiita kubva pane munhu wekutanga mu list tichienda mberi

### Pa line 7 , line 8, na line 9

- Apa tikushandisa enzaniso kuenzanisa nhambaYeVanh na nhambaYekubuda, kana nhambaYeVanh yawedzera kusvika pana 3 inobva yafanana na nhambaYekubuda, saka enzaniso iyi inoita chokwadi.
- Kana enzaniso yaita chokwadi, computer inobva yashandisa code irimuma brackets {} epa kana.
- code ichashandiswa ne computer kana enzaniso iri chokwadi ndi buda. Izvi zvinoreva kuti chibuda mu list, chingosiyana nezvasara kumberi

### 💡 ITA

Nyora code iyoyi mu index.shona, wochiita izvi:

1. mu terminal, nyora kuti: node shona.js wobaya enter
2. mu terminal, nyora kuti: node index.js wobaya enter

Ukaita izvi zvakanaka, uchaona mu terminal makanzi:

Hesi Panashe 1  
Hesi Tanaka 2  
Hesi Kudzai 3

ma nhamba aya ekumberi kwemazita ndiwo nhambaYeVanh iri kuwedzera kana tapinda mu list. nhamba iyi paichaita 3, computer ichabva yabuda mu list, ndosaka mamwe mazita asina kuzonyora mu terminal, nekuti tanga tatobuda kare mu list

 Edit this page

# Mashoko

**⚠ ZVICHIRI KUNYORWA**

## Mashoko chii?

Mashoko zvinhu zvese zvakaiswa mu ma *quotes* " " sokuti:

1. "Inini ndinonzi Panashe"
2. "Ndafara nekukuziva"

"2021" i nhamba here kana mashoko?



"2021" aiswa muma *quotes* saka mashoko haisi nhamba. 2021 inhamba, "2021" mashoko. Izvi zvakakosha kuziva pauchazoverenga nezve *topic* ye Maths kumberi uku.

## Kutsemura Mashoko

Kana uine mutsara wakanzi

"Inini ndinonzi Panashe"

Unogona kutsemura mashoko obva wagadzira list uchishandisa `tsemuraMashoko()` seizedvi

**💡 ITA**

1. mu file rakanzi `index.shona`, nyora kuti:

```
mustara = "Inini ndinonzi Panashe"
listReMashoko = mutsara.tsemuraMashoko()
```

```
nyora(listReMashoko)
```

2. mu terminal nyora kuti node shona.js, wobaya enter

3. mu terminal zvekare, nyora kuti node index.js, wobaya enter

Ukaita izvi zvakanaka, unofana kuona mu terminal makanzi

```
["Inini", "ndinonzi", "Panashe"]
```

Izvi zvakanaka kuziva nekuti zvichazokubatsira kumberi.

## Kutsemura Mavara mumashoko

Unogona kutsemura mavara (letters) ari mumashoko uchishandisa tsemuraMavara()



1. mu file rakanzi index.shona, nyora kuti:

```
zita = "Panashe"
listReMavara = zita.tsemuraMavara()
nyora(listReMavara)
```

2. mu terminal nyora kuti node shona.js, wobaya enter

3. mu terminal zvekare, nyora kuti node index.js, wobaya enter

Ukaita izvi zvakanaka, unofana kuona mu terminal makanzi:

```
["P", "a", "n", "a", "s", "h", "e"]
```

## Kubatanidza mashoko



HAZVISATI ZVANYORWA

 Edit this page

# Maths

 NOT YET REVISED

## Maths ne ShonaScript

Unogona kuita `maths` ne `ShonaScript` dzemhando yakasiyana siyana. Ngatimbotora *addition* (kusanganisa) semuenzaniso:

Image here

Image here

Chii chikuitika apa?🤔

 TSANANGURO

Apa, tikuda kusanganisa `nhamba` 45 na `nhamba` 5. Computer kana yasanganisa ma `nhamba` aya, ichawana mhinduro yacho, asi iwewe kuti ugone kuona mhinduro yawanikwa ne `computer` iyoyo, uchashandisa `nyora()`. Saka tagdzira `variable` inonzi `x` tobva tati ndiyo ichachengeta mhinduro ichawanikwa ne `computer` pakusanganisa 45 na 5.

 ITA

Nyora `code` iyoyi mu `index.shona`, wochiita izvi:

1. mu terminal, nyora kuti: node shona.js wobaya enter

2. mu terminal, nyora kuti: node index.js wobaya enter

ukaita izvi zvakanaka, unofana kuona mu terminal makanzi 50

### 💡 ITA

Chibvisa + aripakati pa 45 na 5, oisa - , oita masteps emuterminal aripamusoro apo uone zvinoitika.

Dzokorora izvi uchashanisa \* na /

Zvinoreva masymbols eMaths aya:

+ - addition (kusanganisa)

- - subtraction (kubvisa)

\* - multiplication

/ - division

## Nhamba.chero()

ShonaScript ine *function* inoita basa rekupa chero nhamba iri pakati pa 0 na 9.

Image here

Image here

## 💡 ITA

Nyora `code` iyozi mu `index.shona`, wochiita izvi:

1. mu `terminal`, nyora kuti: `node shona.js` wobaya `enter`

2. mu `terminal`, nyora kuti: `node index.js` wobaya `enter`

Usachinje chinhu mu `index.shona`, asi dzokorora izvi uchitarisa mu `terminal` zvikuitika:

1. mu `terminal`, nyora kuti: `node shona.js` wobaya `enter`

2. mu `terminal`, nyora kuti: `node index.js` wobaya `enter`

Ukaramba uchingodzokorora izvi, unoona kuti mu `terminal` muri kunyorwa ma `nhamba` akasiyana siyana asi ma `nhamba` aripakati pa 0 na 9.

Ko kana uchida kuti computer ikupe nhamba iri pakati pa 0 na 5



Unoita izvi:

```
x = nhamba.chero(6)
nyora(x)
```

Chachinja apa ndecekuti muma *brackets* a `nhamba.chero()` maiswa `nhamba` 6. Ukaisa `nhamba` muma *brackets* a `nhamba.chero()` unenge uchiudza `computer` kuti ikupe chero `nhamba` iri pasi pe `nhamba` yaiswa muma *brackets*. Sezvo taisa 6 muma *brackets* apa, zvaakureva kuti `computer` inokupa chero `nhamba` iri pakati pa 0 na 5 kwete 0 na 6. Ukaisa `nhamba` muma *brackets* sevataita pekutanga, `computer` inokupa chero `nhamba` iri pakati pa 0 na 9

### 🔥 NHAMBA IRI MUMA BRACKETS A NHAMBA.CHERO()

Ukaisa 3 muma *brackets*, `computer` inokupa chero nhamba iri pakati pa 0 na 2

Ukaisa 6 muma *brackets*, `computer` inokupa chero nhamba iri pakati pa 0 na 5

Ukaisa 9 muma brackets, computer inokupa chero nhamba iri pakati pa 0 na 8

## Gadzira Gemhu (Game)

Taakuda kumbogadzira game inonzi **rock, paper, scissors**. Apa tichaiti **dombo, pepa, chigero**

### !(i) MUTEMO WE GEMHU

1. Pane zvinhu 3 zvaunokwanisa kusarudza:

- dombo
- pepa
- chigero

2. Iwewe uchasarudza pakati pe: dombo, pepa, chigero.

3. Computer ichasarudza pakati pezvinhu 3 izvozvo asi computer ichashandisa nhamba.chero() kuita izvi

4. Pakasarudzwa:

- **dombo ne pepa**, asarudza **dombo** adyiwa nekuti **pepa** rinovhara **dombo**
- **dombo ne chigero**, asarudza **chigero** adyiwa nekuti **dombo** rinotswana **chigero**
- **pepa ne chigero**, asarudza **pepa** adyiwa nekuti **chigero** chinocheka **pepa**

Gemhu iyi tichaigadzira sei?



### (i) NGATIRONGE MAGAZIRIRO ATICHAITA GEMHU

1. Tichagadzira variable yesarudzo yedu, yatichati sarudzoYangu ndobva ndati ndi "dombo"

sarudzoYangu = "dombo"

2. Tichagadzira sarudzo ye computer, computer ichasarudza pakati pa "dombo", "pepa", ne "chigero" ichishandisa nhamba.chero().

- Uchatanga wagadzira list re sarudzo dzese riine "dombo", "pepa", ne "chigero" seizvi:

```
sarudzoDzese = ["dombo", "pepa", "chigero"]
```

- Taakuda kuti computer itore chero chinhu chiru mu sarudzoDzese tichishandisa nhamba.chero(). Ukaisa nhamba muma brackets a nhamba.chero().
- Kana uchida kutora chinhu chiru pekutanga mu sarudzoDzese, unoshandisa sarudzoDzese[0], izvi zvinoreva kuti pinda mu list rironzi sarudzoDzese utore chinhu chiru pana 0. chinhu chekutanga mu list chinonzi chiru pana 0. Izvi zvinoreva kuti chinhu chechipir mu list chiru pana 1
- Saka zvatiri kutaura apa ndezvekuti:
  - "dombo" ari pana sarudzoDzese[0]
  - "pepa" ari pana sarudzoDzese[1]
  - "chigero" ari pana sarudzoDzese[2]
- Isusu tikuda kuti computer isarudze chero pakati pe nhamba 0 na 2
  - Kuti tiwane nhamba iri pakati pa 0 na 2 tichishandisa nhamba.chero() tinoti nhamba.chero(3) togadzira variable yenhamba yasarudzwa ne computer iyoyo seizvi:  
  
nhambaYaSarudzwa = nhamba.chero(3)

Apa panogona kubuda 0,1,kana kuti 2. Hatizive zvichabuda ipapo kusvikira taita kuti code yedu ishande

- Computer yaakukwanisa kushandisa variable ye nhambaYaSarudzwa iya pakusarudza chero pakati pa "dombo", "pepa", ne "Chigero" ichiti sarudzoDzese[nhambaYaSarudzwa] seizvi:

```
sarudzoYeComputer = sarudzoDzese[nhambaYaSarudzwa]
```

- Tichazoshandisa kana, ne enzaniso kutarisa kuti adyiwa pa gemhu ndiani. Tarisa pazasi uone code yacho yese:

Image here

Image here

## ITA

Nyora `code` iyoyi mu `index.shona`, wochiita izvi:

1. mu `terminal`, nyora kuti: `node shona.js` wobaya `enter`
2. mu `terminal`, nyora kuti: `node index.js` wobaya `enter`

Kana uchinge usiri kunzwisa kuti `code` iyi ikushanda sei, unokurudzirwa kubvunza mu *whatsapp group* kuti ubatsirike

 [Edit this page](#)

# Nguva ne Zuva

 NOT YET REVISED

ShonaScript inogona kukuradzidza `nguva` kana `zuva` mu `terminal`.

## Nguva

Kana uchida kuona kuti inguvai uchishandisa ShonaScript, unogadzira `variable` yenguva seizvi:

```
nguva = Nguva
nyora(nguva)
```

 ITA

Nyora `code` iyoyi mu `index.shona`, wochiita izvi:

1. mu `terminal`, nyora kuti: `node shona.js` wobaya `enter`
2. mu `terminal`, nyora kuti: `node index.js` wobaya `enter`

Ukaita izvi unofana kuona mu `terminal` nguva dzacho sokuti `11:02:10 AM`

## Zuva

Kana uchida kuona kuti inguvai uchishandisa ShonaScript, unogadzira `variable` yenguva seizvi:

```
zuvaRanhasi = Zuva
nyora(zuvaRanhasi)
```

 ITA

Nyora `code` iyozi mu `index.shona`, wochiita izvi:

1. mu `terminal`, nyora kuti: `node shona.js` wobaya `enter`

2. mu `terminal`, nyora kuti: `node index.js` wobaya `enter`

Ukaita izvi unofana kuona mu `terminal` zuva ranhasi racho sokuti `11/21/2021`. Zuva iri rinogona kunyorwa zvakasiyana neizvi zvichiederana ne `computer` yaukushandisa

Kana wave kuziva zvema `functions`, uchazogadzira `function` inoita kuti unyore nguva mu `terminal` ichiverenga ma `seconds`

 [Edit this page](#)

# Ma Functions

## Ma function chii?

Ma *functions* i `code` yaunogadzira kana uchida kuzoituma kuti `basa` kumberi. Nemamwe mashoko, tiri kuti `function` i `basa`. Ngatimboti iwewe ukuda kugadzira `basa` rino mhoresa munhu. Rinogadzirwa se izvi:

Image here

### Chii chikuitika apa?

#### ! TSANANGURO

Kubva pana `line 1`, `line 2`, na `line 3`, tagadzira `basa` rionzi `mhoresaMunhu`.

- Zita re `basa` rinofana kunyorwa sekunge uri urikugadzira `variable`.
- Pamberi pezita re `basa` panoiswa ma *brackets* `( )`, muma brackets imomo munogona kuiswa ma `variable` kana kuti munogona kusaiswa chinhu, sezvaukuona pa `code` iyi.

Pa `line 5`:

```
tangaBasa.mhoresaMunhu()
```

Apa tiri kutuma computer kuita `basa` ratagadzira rionzi `mhoresaMunhu( )`. Ma *brackets* `( )` haasiwe.

## ITA

Nyora `code` iyoyi mu `index.shona`, wochiita izvi:

1. mu `terminal`, nyora kuti: `node shona.js` wobaya `enter`
2. mu `terminal`, nyora kuti: `node index.js` wobaya `enter`

Ukaita izvi, unofana kuona mu `terminal` makanzi

Hesi

Ngatimbobvisa `line 5` rakanzi `tangaBasa.mhoresaMunhu()`

## ITA

1. mu `index.shona` dzima `line 5` rekuti `tangaBasa.mhoresaMunhu()`
2. mu `terminal`, nyora kuti: `node shona.js` wobaya `enter`
3. mu `terminal`, nyora kuti: `node index.js` wobaya `enter`

Ukaita izvi, mu `terminal` **hamuna chinonyorwa**.

Izvi zvinoitika nekuti wagadzira `basa` rekumhoresa munhu, asi hauna kuzoudza `computer` kuti itanga `basa` racho, saka `basa` hariitwe kana risina kutangwa na `tangaBasa.mhoresaMunhu()`

## **Basa ne ma variable**

Unogona kugadzira basa rinotora `variable` inozoshandiswa ne basa racho kana razotanga. Ngatomboti iwewe ukuda kugadzira `basa` rinomhoresa munhu asi ukuda kuzopa `basa` zita remunhu wekumhoresa. Unoita seizvi:

Image here

Chii chikuitika apa?

### ❗ TSANANGURO

Apa ukugadzira `basa` rinonzi `mhoresaMunhu`, asi ukuudza `computer` kuti kana basa iri rave kutangwa, rnofana kupihwa `variable` inonzi `zita` ichazoshandisa na `nyora("Hesi ", zita)`.

### 💡 ITA

Nyora `code` iyoyi mu `index.shona`, wochiita izvi:

1. mu `terminal`, nyora kuti: `node shona.js` wobaya `enter`
2. mu `terminal`, nyora kuti: `node index.js` wobaya `enter`

Ukaita izvi, unofana kuona mu terminal kuti

Hesi Panashe

### 🔥 DANGER

Ukada kuenda kutanga `basa` usina kuisa variable, `computer` ichakuudza kuti

paita problem, basa rinonzi `mhoresaMunhu`  
ranga richifana kupihwa variable 1 asi iwewe waisa mavariabels 0.

# Basa re Maths

Tikuda kugadzira basa rinosanganisa ma nhamba 2 arinenge rapihwa.

Image here

Chii chikuitika apa?

! TSANANGURO

Kubva pa **line 1** kuzvika pa **line 4**

Apa tiri kugadzira basa rionzi sanganisa, basa iri rinofana kuzopihwa ma variable anonzi nhambaYekutanga na nhambaYechipiri anofana kunge ari ma nhamba nekuti haukwanise kusanganise zvisiri ma nhamba

💡 ITA

Nyora code iyozi mu index.shona, wochiita izvi:

1. mu terminal, nyora kuti: node shona.js wobaya enter
2. mu terminal, nyora kuti: node index.js wobaya enter

Ukaita izvi unofana kuona mu terminal makanzi

Unogona kuchinja ma nhamba oona kuti chii chinotika, kana kuchinja + oisa -, kana \*, kana /

# Basa rinoshanda ne nguva

## Mirira \_ seconds

unogona kugadzira basa ronomirira kuzotanga kana papfuura ma seconds aunenge wataura iwewe

Image here

### Chii chikuitika apa?

#### ! TSANANGURO

Tangodzokorora kugadzira basa rionzi mhoresaMunhu sevataita pakutanga, asi patagadzira basa iri, taudza computer kuti mirira 3 seconds kuitira kuti kana basa iri razotangwa, ronomirira ma seconds enguva 3 robva razotanga.

#### 💡 ITA

Nyora code iyoyi mu index.shona, wochiita izvi:

1. mu terminal, nyora kuti: node shona.js wobaya enter
2. mu terminal, nyora kuti: node index.js wobaya enter

Ukaita izvi, uchaona kuti mu **terminal** munombotanga musina chinhu kwenguva diki, mozonyorwa kuti

Hesi

Hesi anyorwa padarika 3 *seconds* dze nguva

## Dzokorora \_ seconds

Unogona kugadzira **basa** rinodzokorora rega kuitika kana papera ma *seconds* enguva aunenge wataura iwewe sokuti:

Image here

### Chii chikuitika apa?

! TSANANGURO

Zvekare tagadzira **basa** reku **mhoresaMunhu**, asi apa tikuda kuti **basa** iri rirambe richidzokororwa kana papfuura 1 *second* ye nguva.

💡 ITA

Nyora **code** iyoyi mu **index.shona**, wochiita izvi:

1. mu **terminal**, nyora kuti: **node shona.js** wobaya **enter**
2. mu **terminal**, nyora kuti: **node index.js** wobaya **enter**

Ukaita izvi, unoona kuti mu **terminal** mucharamba muchinyorwa **Hesi** kana papera 1 second yenguva

Hesi  
Hesi  
Hesi  
Hesi

Mu **terminal** imomo munoramba muchinyorwa kuti **Hesi** kusvika **computer** yako yadzima

Ndoita sei kana ndichida kuti Hesi amire kunyorwa?



#### **KUTI HESI AMIRE KUNYORWA**

1. mu **terminal**, baya **control** na **c** panguva imwechete. Izvi zvinofana kuita kuti mu **terminal** mumire kunyorwa kuti **Hesi**

Gadzira basa rinonyora nguva mu **terminal**

#### **(i) RONGA**

- basa iri rinofana kunshandisa:
  - i. **nyora()**
  - ii. **Nguva**
  - iii. **dzokorora 1 second**
- Kana wapedza tarisa **code** yacho pasi kana yako yaramba kushandisa

Image here

## Kushandisa misaBasa.

Unogona kushandisa `misaBasa.mhoresaMunhu()` kuita kuti basa rimire. Ngatimboti tikuda kumhoresa munhu la `3`, tobva tamisa `basa`. Tinoita sei?

 RONGA

Tichashandisa zvinhu izvi:

1. `basa dzokorora`
2. `nyora`
3. `kana`
4. `enzaniso`
5. `misaBasa`

Chimboedza kunyora `code` iyi wega woona kuti zvinoshanda here

**Answer**

Image here

## ! TSANANGURO

Tinotarisira kuti waakunzwisia zvakawanda zviri mucode umu, saka tichangotsanangur zviri kuitika kubva pa `line 9` kusvika pa `line 11`

- `variable` inonzi `nhambaYekuverenga` icharamba ichiwedzera kubva pana 0 kusvika 3
- ikasvika pana 3, yaenzana ne `variable` inonzi `nhambaYekumira`, saka pa `line 10`, tikuudza `computer` kuti `misaBasa` rinonzi `nyoraNguva()`

 [Edit this page](#)

# Mhinduro

**⚠ NOT YET REVISED**

Unogona kuda kunyora `code` inoita kuti munhu apindure mu `terminal`, sokuti unogona kuda kuti munhu anyore zita rake mu `terminal`, iwewe wozotora zita iroro oita zvaunoda naro zvakaita seku mhoresa munhu iyeye. Tarisa pazasi apa, uone kuti izvi zvinotwa sei:

Kuita izvi, tinoshandisa zvinhu 2:

1. `teerera mhinduro _`
2. `tora mhinduro _ {`

Image Here

**Chii chikuitika apa?!**

**! TSANANGURO**

**Line 1**

`teerera mhinduro zita`

Tiri kuudza `computer` kuti iteerere zvichanyorwa mu `terminal`. Kana yateerera zvichanyorwa, ichabva yagadzira `variable` inonzi `zita`. `zita` apa ndizvo zvese zvichanyorwa mu `terminal`.

Kubva pa **line 3** kuzvika pa **line 5** Apa taakuudza **computer** kuti tora mhinduro yanyorwa mu **terminal** ine variable rekuti **zita**, obva wa **nyora** kuti "Hesi ", **zita**

### 💡 ITA

Nyora **code** iyoyi mu **index.shona**, wochiita izvi:

1. mu **terminal**, nyora kuti: **node shona.js** wobaya **enter**
2. mu **terminal**, nyora kuti: **node index.js** wobaya **enter**

**mhinduro: zita:**

Izvi zvinoreva kuti **computer** yakamirira iwewe kuti unyore **zita** rako kana chero rimwe **zita** raukuda kunyora, mobva wabaya **enter**. Ukaita izvi, uchaona mu **terminal** makanzi:

Ukaita izvi, ukanyora muterminal zita racho, unofana kuona mu **terminal** makanzi

Hesi (zita rawanyora iwewe)

## Waakushanda kuzvitupa zvekare

Takambokupa **basa** rekuudza vanhu vauya kuzotora zvitupa kuti vaende ku *Office* kunotora chitupa **kana** vaine makore 16 zvienda mberi, kana kuti vaende kumba **kana** vaine makore 15 zvichidzika *mutopic ye enzaniso*. Patanyora **code** yezvitupa, takagadzira **variable** inonzi **makoreEmunhu** tikabva taipa makore acho iri **nhamba**. Kana wakanganwa, tarisa pazasi apa **code** yacho yese yatakanyora

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Unoita sei kana uchida kushandisa mhinduro kuwana makore emunhu



## Chiita uchishandisa mhinduro

Apa taakuda kunyora code iyi zvekare, asi ikozvino pane kuti ugadzire variable yekuti makoreEmunhu sezwawakaita pa enzaniso, uchagadzira variable iyoyo uchishandisa teerera mhinduro seizvi:

teerera mhinduro makoreEMunhu

computer ichamirira kuti makore emunhu anyorwe mu terminal, iwewe wobva watora mhinduro iyoyo ochishandisa code iri kubva pa line 4 kusvika pa line 8 mu picture iri pamusoro apo. Kana wapedza, code yako inofana kuita seizvi:

Image Here



Nyora code iyozi mu index.shona, wochiita izvi:

1. mu terminal, nyora kuti: node shona.js wobaya enter
2. mu terminal, nyora kuti: node index.js wobaya enter

mhinduro: makoreEMunhu:

Izvi zvinoreva kuti computer yakamirira iwewe kuti unyore makoreEmunhu. Saka nyora kuti nhamba yemakore acho, wobva wabaya enter.

Ukanyora nhamba iri pasi pa 16 sokuti 12, mu terminal munofana kunyora kuti:

Uchiri mudiki, unozodzoka waane makore 16

Asi ukanyorawo nhamba iri pamusoro pa 16 sokuti 21, mu terminal munofana kunyorwa kuti:

Enda ku Office kunotora chitupa

 Edit this page

# Ma Objects

 COMING SOON

Not yet available

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# ShonaScript to JavaScript

 COMING SOON

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# ShonaScript to Python

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