

## ▼ Postavka Julie u Google Colab

Potrebno je preuzeti ovaj notebook, upload-ovati ga i pokrenuti kôd ispod prilikom kreiranja notebook-a za sve vježbe. Nakon pokretanja, potrebno je restartovati notebook. U *Runtime* kliknite na *Change runtime type* i odaberite Juliu i GPU. Sada možete koristiti Juliu za sve što radite.

U slučaju da vam krene izbacivati greške radi gubitka trenutne sesije izvršite sve naredbe opet i restartujte notebook.

```
!curl -sSL "https://julialang-s3.julialang.org/bin/linux/x64/1.5/julia-1.5.2-linux-x86_64.tar
!tar -xzf julia.tar.gz -C /usr --strip-components 1
!rm -rf julia.tar.gz*
!julia -e 'using Pkg; pkg"add IJulia; precompile"'
!echo "DONE"
```

```
##### 100.0%
Downloading artifact: LibSSH2
##### 100.0%
Downloading artifact: libsodium
##### 100.0%
Downloading artifact: nghttp2
##### 100.0%
Updating `~/ .julia/environments/v1.5/Project.toml`
  [7073ff75] + IJulia v1.23.2
Updating `~/ .julia/environments/v1.5/Manifest.toml`
  [0dad84c5] + ArgTools v1.1.1
  [56f22d72] + Artifacts v1.3.0
  [8f4d0f93] + Conda v1.6.0
  [f43a241f] + Downloads v1.6.0
  [7073ff75] + IJulia v1.23.2
  [692b3bcd] + JLLWrappers v1.3.0
  [682c06a0] + JSON v0.21.2
  [b27032c2] + LibCURL v0.6.3
  [deac9b47] + LibCURL_jll v7.70.0+2
  [29816b5a] + LibSSH2_jll v1.9.0+3
  [739be429] + MbedTLS v1.0.3
  [c8ffd9c3] + MbedTLS_jll v2.16.8+1
  [14a3606d] + MozillaCACerts_jll v2021.1.19+0
  [ca575930] + NetworkOptions v1.2.0
  [69de0a69] + Parsers v2.1.3
  [21216c6a] + Preferences v1.2.3
  [b85f4697] + SoftGlobalScope v1.1.0
  [fa267f1f] + TOML v1.0.3
  [81def892] + VersionParsing v1.2.1
  [c2297ded] + ZMQ v1.2.1
  [8f1865be] + ZeroMQ_jll v4.3.2+6
  [83775a58] + Zlib_jll v1.2.11+18
  [a9144af2] + libsodium_jll v1.0.19+0
  [8e850ede] + nghttp2_jll v1.40.0+2
  [2a0f44e3] + Base64
  [ade2ca70] + Dates
  [8ba89e20] + Distributed
```

```

[7b1f6079] + FileWatching
[b77e0a4c] + InteractiveUtils
[76f85450] + LibGit2
[8f399da3] + Libdl
[56ddb016] + Logging
[d6f4376e] + Markdown
[a63ad114] + Mmap
[44cfe95a] + Pkg
[de0858da] + Printf
[3fa0cd96] + REPL
[9a3f8284] + Random
[ea8e919c] + SHA
[9e88b42a] + Serialization
[6462fe0b] + Sockets
[8dfed614] + Test
[cf7118a7] + UUIDs
[4ec0a83e] + Unicode
Building Conda → `~/ .julia/packages/Conda/1403Y/deps/build.log`
Building IJulia → `~/ .julia/packages/IJulia/e8kqU/deps/build.log`
Precompiling project...
DONE

```

```
using LinearAlgebra
```

```
function rasporedi(M)
```

```

for i=1:size(M,1)
    min=M[i,1]
    for j=1:size(M,2)
        if min>M[i,j]
            min = M[i,j]
        end
    end
    for j=1:size(M,2)
        M[i,j]=M[i,j]-min
    end
end

```

```

for j=1:size(M,2)
    min=M[1,j]
    for i =1:size(M,1)
        if M[i,j]<min
            min=M[i,j]
        end
    end
    for i=1:size(M,1)
        M[i,j]=M[i,j]-min
    end
end

```

```
oznacikolonu=1
```

```
for i=1:size(M,1)
jedna=0
for j=1:size(M,2)

    if M[i,j]==0
        jedna=jedna+1
        oznacikolonu=j
    end

end

if jedna==1
    for j=1:size(M,2)
        if M[i,j]==0
            M[i,j]=-1
        end
    end

    for k=1:size(M,2)
        if M[k,oznacikolonu]==0
            M[k,oznacikolonu]=-2
        end
    end

    jedna=0
end
if jedna >1
zapamtikolonu = 0
for j=1:size(M,2)
    if M[i,j]==0
        M[i,j]=-1
        zapamtikolonu=j
        break
    end
end

    for k=1:size(M,1)
        if M[k,zapamtikolonu]==0
            M[k,zapamtikolonu]=-2
        end
    end

for j=1:size(M,2)
    if M[i,j]==0
        M[i,j]=-2
    end
end

end
```

```
jedna=0  
end
```

```
return M  
end
```

```
rasporedi (generic function with 1 method)
```

```
rasporedi([80 20 23; 31 40 12; 61 1 1])
```

```
3×3 Array{Int64,2}:  
 41  -1   3  
 -1  28  -2  
 41  -2  -1
```

```
rasporedi([25 55 40 80; 75 40 60 95; 35 50 120 80; 15 30 55 65])
```

```
↳ 4×4 Array{Int64,2}:  
 -1  30  -2  10  
 35  -1   5  10  
 -2  15  70  -1  
 -2  15  25   5
```

---

✓ 0s completed at 9:51 PM

