dataset sample is contains:

- original code functions: 100 JavaScript functions.
- obfuscated code functions: obfuscator.io; ByteHide.
- deobfuscated_code_functions: (relative.im: obfuscator.io; ByteHide); (js-beautify: obfuscator.io; ByteHide); (obf-io.deobfuscate.io: obfuscator.io; ByteHide).

Save dataset sample is in Downloads/Scaricati.

Download obfuscator.io

(https://github.com/javascript-obfuscator/javascript-obfuscator terminal: npm install --save-dev javascript-obfuscator) on the virtual machine (VirtualBox) with ubuntu, save node_modules in a folder called obfuscator.io.

Download relative.im (https://github.com/relative/synchrony terminal: sudo su - npm install --global deobfuscator) on the virtual machine (VirtualBox) with ubuntu.

Download js-beautify (https://github.com/beautifier/js-beautify terminal: npm install js-beautify@next) on the virtual machine (VirtualBox) with ubuntu, save node_modules in a folder called js-beautify@next.

Download obf-io.deobfuscate.io

(https://www.npmjs.com/package/obfuscator-io terminal: npm i obfuscator-io) on the virtual machine (VirtualBox) with ubuntu, save node_modules in a folder called obf-io.deobfuscate.io.

OBFUSCATED via ByteHide:

https://www.bytehide.com/products/shield-obfuscator/javascript

BASH SCRIPT TO OBFUSCATE:

- - obfuscator.io -
- general terminal

for f in `ls ~/Scaricati/dataset sample js/original code functions/*.js`; do

- ~/obfuscator.io/node_modules/javascript-obfuscator/bin/./javascript-obfuscator \$f; done; for h in `ls
- ~/Scaricati/dataset_sample_js/original_code_functions/*obfuscated.js`; do mv \$h
- ~/Scaricati/dataset sample js/obfuscated code functions/obfuscator.io; done

BASH SCRIPT TO DEOBFUSCATE:

- - relative.im -
 - - obfuscator.io -
 - __general terminal

for f in `ls

- ~/Scaricati/dataset_sample_js/obfuscated_code_functions/obfuscator.io/*-obfuscated.js`; do synchrony deobfuscate \$f; done; for h in `ls
- ~/Scaricati/dataset_sample_js/obfuscated_code_functions/obfuscator.io/*-obfuscated.cleaned.js`; do mv \$h

- ~/Scaricati/dataset_sample_js/deobfuscated_code_functions/relative.im/obfus cator.io; done
- - ByteHide -

general terminal

for f in `ls

- ~/Scaricati/dataset_sample_js/obfuscated_code_functions/ByteHide/*.js`; do synchrony deobfuscate \$f; done; for h in `ls
- ~/Scaricati/dataset_sample_js/obfuscated_code_functions/ByteHide/*-shield.c leaned.js`; do mv \$h
- ~/Scaricati/dataset_sample_js/deobfuscated_code_functions/relative.im/Byte Hide; done
- - js-beautify -
 - - obfuscator.io -
 - __general terminal with path
 - ~/Scaricati/dataset_sample_js/obfuscated_code_functions/obfuscator.io for f in `ls *-obfuscated.js`; do
 - ~/js-beautify@next/node_modules/js-beautify/js/bin/./js-beautify.js -f \$f >
 - ~/Scaricati/dataset_sample_js/deobfuscated_code_functions/js-beautify/obfus cator.io/beautify-\$f; done;
 - - ByteHide -
 - general terminal with path
 - ~/Scaricati/dataset_sample_js/obfuscated_code_functions/ByteHide for f in `ls *-shield.js`; do
 - ~/js-beautify@next/node_modules/js-beautify/js/bin/./js-beautify.js -f \$f >
 - ~/Scaricati/dataset_sample_js/deobfuscated_code_functions/js-beautify/Byte Hide/beautify-\$f; done;
- - obf-io.deobfuscate.io -

Path: ~/obf-io.deobfuscate.io/node modules/obfuscator-io

In the folder dist:

create a file called originalrun.js and save here the original content of run.js.

in the run.js file on line 16 change 'input/source.js' to 'input/obfuscator.js'.

in the run.js file on line 17 change 'output/output.js' to 'output/deobf.js'

In the folder input:

copy the source.js file and paste it out of the folder and then create a new empty file named obfuscator.js.

In the folder output:

copy the output.js file and paste it out of the folder and then create a new empty file named deobf.is.

- - obfuscator.io - -

MOVE factorial.js in folder factorial1_2_3

```
general terminal with path
      ~/obf-io.deobfuscate.io/node modules/obfuscator-io
      for f in `ls
      ~/Scaricati/dataset sample js/obfuscated code functions/obfuscator.io/*.js`;
      do cat $f >
      ~/obf-io.deobfuscate.io/node modules/obfuscator-io/input/obfuscator.js;
      var=$(echo $f | xargs -n 1 basename);
      ~/obf-io.deobfuscate.io/node modules/obfuscator-io/dist/./run.js; cp
      ~/obf-io.deobfuscate.io/node modules/obfuscator-io/output/deobf.js
      ~/Scaricati/dataset_sample_js/deobfuscated_code_functions/obf-io.deobfusca
      te.io/obfuscator.io/$var; done;
      EXTRACT from folder factorial 2 3: factorial.js
      - - ByteHide - -
      MOVE factorial.js in folder factorial
      __general terminal with path
      ~/obf-io.deobfuscate.io/node_modules/obfuscator-io
      for h in 'ls
      ~/Scaricati/dataset sample js/obfuscated code functions/ByteHide/*.js`; do
      cat $h >
      ~/obf-io.deobfuscate.io/node_modules/obfuscator-io/input/obfuscator.js;
      var=$(echo $h | xargs -n 1 basename);
      ~/obf-io.deobfuscate.io/node modules/obfuscator-io/dist/./run.js; cp
      ~/obf-io.deobfuscate.io/node modules/obfuscator-io/output/deobf.js
      ~/Scaricati/dataset sample js/deobfuscated code functions/obf-io.deobfusca
      te.io/ByteHide/$var; done;
      EXTRACT from folder factorial: factorial.js
BASH SCRIPT PER ESEGUIRE: general terminal
- - original code - -
for f in `ls ~/Scaricati/dataset sample js/original code functions/*.js`; do node $f;
done;
- - obfuscated code obfuscator.io - -
for h in 'ls
~/Scaricati/dataset sample js/obfuscated code functions/obfuscator.io/*-obfuscate
d.js`; do node $h; done;
- - obfuscated code ByteHide - -
for b in `ls ~/Scaricati/dataset sample js/obfuscated code functions/ByteHide/*.js`;
do node $b; done;
- - deobfuscated code relative.im - -
      - - obfuscator.io - -
```

for k in 'ls

~/Scaricati/dataset_sample_js/deobfuscated_code_functions/relative.im/obfus cator.io/*-obfuscated.cleaned.js`; do node \$k; done;

- - ByteHide - -

for k in `ls

~/Scaricati/dataset_sample_js/deobfuscated_code_functions/relative.im/Byte Hide/*.js`; do node \$k; done;

- - deobfuscated code js-beautify -
 - - obfuscator.io -

for z in `ls

~/Scaricati/dataset_sample_js/deobfuscated_code_functions/js-beautify/obfus cator.io/*.js`; do node \$z; done;

- - ByteHide - -

for z in `ls

~/Scaricati/dataset_sample_js/deobfuscated_code_functions/js-beautify/Byte Hide/*.js`; do node \$z; done;

- - deobfuscated code obf-io.deobfuscate.io -
 - - obfuscator.io -

for q in `ls

~/Scaricati/dataset_sample_js/deobfuscated_code_functions/obf-io.deobfuscate.io/obfuscator.io/*.js`; do node \$q; done;

- - ByteHide - -

for q in `ls

~/Scaricati/dataset_sample_js/deobfuscated_code_functions/obf-io.deobfuscate.io/ByteHide/*.js`; do node \$q; done;