

Storing user input to a variable

```
name = str(input("What's your name"))
```

Better Version:

```
name = input("What's your name")  
# input function already returns string
```

check if a variable is True or False in an if statement

```
isPrime = True  
if isPrime == True:  
    ...  
if isPrime == False:  
    ...
```

Better Version:

```
isPrime = True  
if isPrime:  
    ...  
if not isPrime:  
    ...
```

```
# if statements already evaluate is a variable is True.  
# place a "not" will reverse the evaluation, but not the actual boolean value
```

Check if player variable is the same as “Rock”, “rock”, “R” or “r”

```
if player == "Rock" or player == "R" or player == "r" or player == 'rock':
```

Better Version:

```
if player in ["Rock", "R", "r", "rock"]:  
# check if player is equivalent to any of the item in the list  
  
# OR  
  
if player.lower() in ["r", "rock"]:  
# further simplify by changing input to all lowercase
```

Loop for 10 times

```
for i in range(0,10):  
    ...
```

Better Version:

```
for i in range(10):  
    ...  
# 0 is the default lower bound
```

Print a long message

```
print("This is a boring text document and I have no idea how I made it through reading this.\nThis assignment is super boring too but it will be helpful")
```

Better Version:

```
print( "This is a boring text document and I have no idea  
      \  
      how I made it through reading this.\nThis assignment  
nt    \  
      is super boring too but it will be helpful")  
# break off lines by using "\" as a breakline indicator
```

Print the same statment for 5 times

```
print("~~~~~")
```

```
print("~~~~~")
print("~~~~~")
print("~~~~~")
print("~~~~~")
```

Better Version:

```
for i in range(5):
    print("~" * 10)
# Use a loop
```

Proper Function Documentation

```
import random
def randomNum(l, h):
    """
    Generate a random integer within given range

    Uses random class to, pseudo-random algorithm

    Parameters
    -----
    l : int
        lower bound of the range (inclusive)
    h : int
        higher bound of the range (exclusive)
```

Returns

int

an integer randomly picked in range [l,h)

"""

...

...

...

return random.randint(l, h)

def greeting ():

"""

display "Hello World!" on the console

Parameters

NONE

Returns

NONE

"""

...

...

...

```
print("Hello World!")
```