1 Output

Write one line of code that will print "Hello World!" Now modify the code so the output looks like this (two lines or output, second line starts with two spaces):

Hello

 World

2 Input

2.1 Name and Age

Create a program that asks the user to enter their name and their age.

Print out a message addressed to them that tells them their name and the year that they will turn 100 years old.

3 Variables

3.1 Copying Variables

True or False? Running var = 3 creates an object. Running another_var = var creates another object with the value of var

3.2 Valid Variable Names

a) Which of the following is a valid variable name?
x
x_and_y
x_&_y
2
2nd
_2
x-y

b) True or False? If we defined a variable called var then, VAR is the same name as Python is not case-sensitive

3.3 Multiple Variable Assignments

How can you write the following code differently but have the same result?

```
a=1
b=1
c=1
```

4 Numbers

4.1 Operations 1

What is the result of the following operations in Python?

```
4 / 3
4 / 0
4 // 3
4 // 0
```

4.2 Operations 2

What will the following block of code will print?

```
x = 3
x -= 1
print(x)
x += 5
print(x)
x **= 2.0
print(x)
x += 2 * (3 + 1)
print(x)
```

5 Strings

5.1 Strings, Outputs & Variables

Print the following using the variable: fruit = "strawberry"

Best fruit is: strawberry

Yes, strawberry. Only strawberry

Hello, my name is Mr. Strawberry

fruit = 'strawberry'

5.2 22 Times

Objectives: Print the character '-' 22 times (No new lines between the characters).

Use the * (multiplication operator in a string variable or literal)

5.3 What is the result?

What is the result of each of the following statements?

```
"abc"*3
"abc"*2.5
"abc"*2.0
```

```
"abc"*True
"abc"*False
print("xy\tz")
print("xy\"z\'")
"qwer" "xyz"
"123456"[0]
"123456"[-1]
print("\\a\\b\a\c")
```

5.4 Start with a Letter

How to check if a string starts with a letter? Provide an example with code

5.5 Removing Characters

a)How to remove a trailing slash ('/') from a string?
b) How to remove the first character from a string?
Hint: if you use variables to store the string, you need to reassign a substring to the same variable name

5.6 Reverse String

Reverse the following string: s =

5.7 Slicing

What is the result of each of the following statements if x = 'abcdefgh'

```
x[:]
x[2:]
x[2:2]
x[2:3]
x[-1:]
x[-1:-2]
x[3:-1]
x[::1]
x[::3]
x[1:2:3]
x[::-1]
x[1::-1]
```

6 Booleans

6.1 Operations

What is the result of each of the following statements? Briefly explain why

```
1 > 2
1 == 1
```

```
4 < 1
'two' > 1
"" == " "
'two' > 'three'
[] == []
```

6.2 True or False?

What is the result of each of the following statements?

```
bool(1)
bool("2017")
bool("")
bool(0)
bool()
bool(" ")
True-True
```

6.3 Conversion

What is the result of each of the following statements?

```
int(False)
int(True)
bool(0)
bool(1)
True + 2
float(True)
```