Assignment No.1

Que.1 Declare different variables for different types of data's

Variable

```
a = 10

print(type(a))

<class 'int'>

b = 10.6

print(type(b))

<class 'float'>

c = "Saurabh"

print(type(c))

<class 'str'>
```

Que.2 By the help of format specifiers access the variables

```
var1 = "Saurabh Palve"
var2 =  9373299385
var3 =  "MIT Academy of Engineering"
var4 = 8.0

print("My name is %s and My mobile number is %d and I have completed
my graduation in %s and I got CGPA as %f"%(var1,var2,var3,var4))

My name is Saurabh Palve and My mobile number is 9373299385 and I have
completed my graduation in MIT Academy of Engineering and I got CGPA
as 8.000000
```

Que.3 How to take input from the user without directly assigning values to the variable

```
a = int(input())
b = str(input())
c = float(input())
```

```
12
"Pratik"
45.6
```

Que.4 what is the alternate of Anaconda Jupyter if your machine has low computational power

Ans:Python,pycharm,pip,Jupiter and pandas are the most popular alternatives and competitors to Anaconda

Que.5 In python is it necessary to declare what type of variable it is? if no? why?

Ans: No, Because Python is so highly dynamic language it's simply impossible for the Python compiler to figure out the type of anything without executing the program.

Que.6 Declare a variable and store an integer value in it and in the second statement increment that value by 10

```python
a = int(input())
print(a+10)
```

```
52
62
```

Que.7 follow the pseudo code write the correct output

Num = 10

Num + 10

Num

```python
Num = 10
Num = Num+10
Num
```

Que.8 :Declear three variables and store three different types of data (name(string type),id(integer type),#cgpa(float type)) and print a statement "Hello my name is and my id is and my cgpa is " access the values using Format Specifiers

```python
name = "Saurabh"
id = int(25)
cgpa = float(8.5)

print("Hello my name is %s and my id is %d and my cgpa is %f"%
(name,id,cgpa))

Hello my name is Saurabh and my id is 25 and my cgpa is 8.500000
```

Sets

Que 1 Write a Python program to create a set.

```python
set1 = {"saurabh","rohit","pratik","tushar"}

print(set1)

{'pratik', 'rohit', 'saurabh', 'tushar'}
```

Que.2 Write a Python program to iteration over sets.

```python
# Creating set using string
set_1 = set("saurabhpalve")
# For iterating using loop
for val in set_1:
    print(val)

b
p
s
l
v
r
e
a
h
u
```

Que.3 Write a Python program to add a member(s) in a set.

```python
set_2 = {"Apple","Mango","Banana","Orange","Pineapple","Strawberry"}

print(set_2)
```

```
{'Apple', 'Banana', 'Mango', 'Orange', 'Pineapple', 'Strawberry'}
```

```python
set_2.add("Ramphal")

print(set_2)
```

```
{'Apple', 'Banana', 'Mango', 'Orange', 'Pineapple', 'Ramphal',
'Strawberry'}
```

Que.4 Write a Python program to remove item(s) from a given set.

```python
set_3 = {"Apple","Mango","Banana","Orange","Pineapple","Strawberry"}

set_3.remove("Banana")

print(set_3)
```

```
{'Apple', 'Mango', 'Orange', 'Pineapple', 'Strawberry'}
```

Que.5 Write a Python program to remove an item from a set if it is present in the set

```python
s = {"Rohit","Ankita","Pratik","Karan","Saurabh","Virendra","Shubham"}
s.remove("Ankita")
print(s)
```

```
{'Saurabh', 'Rohit', 'Pratik', 'Virendra', 'Shubham', 'Karan'}
```

Que. 6 Write a Python program to find the maximum and the minimum value in a set.

```python
s = {25,56,89,78,86,47,63,56}

print(min(s))
```

```
25
```

```python
print(max(s))
```

```
89
```

Que. 7 :Write a Python program to find the length of a set.

```python
s = {25,56,89,78,86,47,63,56}
```

```
print(len(s))
```

7

Que. 8 Write a Python program to check if a given value is present in a set or not Dictionary.

```
number = {25,36,56,89,78,42,10,30}
print("The numbers are:",number,"/n")
```

The numbers are: {36, 42, 10, 78, 30, 56, 89, 25} /n

```
print(78 in number)
```

True

```
print(50 in number)
```

False