PYTHON ASSIGNMENT MAJOR

1.Find the datatype of these two declaration : x =5 y = "John"

```
In [4]: x = 5
y = "John"
print(type(x))
print(type(y))

<class 'int'>
<class 'str'>
```

1. Check whether the following syntax is valid or invalid for naming avariable.

Example:

```
abc=100 #valid syntax

i.3a=10 #invalid syntax

ii.@abc=10 #invalid syntax

iii.a100=100 #valid syntax

iv. a984_=100 # valid syntax

v.a9967$=100 #invalid syntax

vi.xyz-2=100 #invalid syntax
```

3. Check if element exists in list in Python:

```
list = test_list = [1, 6, 3, 5, 3, 4]
```

1.Check if 3 exist or not.

```
thislist =[1,6,3,5,3,4]

if 3 in thislist:

print("Yes, 3 is in the my list")
```

Yes, 3 is in the my list

2.Check if 9 exists or not

```
In [48]: thislist =[1,6,3,5,3,4]

if 9 in thislist:

print("yes, 9 is in the my list")

else:

print("no, 9 is not in the my list")
```

no, 9 is not in the my list

4. Take the user input to print the current date.

```
import datetime
x = datetime.datetime.now()
print(x)
```

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5. what is the output of the following code :

a.print 9//2

```
: x = 9
y = 2

print(x // y)

#FLOOR DIVISION
# x = 9
#y = 2
#print(x // y)
```

b. print 9%2

```
x = 9
y = 2
print(x % y)
#MODULUS
#x = 9
#y = 2
#print(x % y)
```

6.Print First 10 natural numbers using a while loop

```
i = 1
while i <= 10:
    print(i)
    i += 1

1
2
3
4
5
6
7</pre>
```

8

9 10

7.Write a program to accept a number from a user and calculate the sum of all numbers from

1 to a given number.

For example , if the user entered 10 the out put should be 55 (1+2+3+4+5+6+7+8+9+10)

```
|st = []
no_of_ele=int(input("length of the list to be:"))
for i in range(no of ele):
ele = int(input())
lst.append(ele)
print(lst)
sum = 0
for i in range(len(lst)):
sum+=lst[i]
print("Sum of the elements of the given list is:",sum)
length of the list to be:10
2
3
4
5
6
7
8
9
10
[1, 2, 3, 4, 5, 6, 7, 8, 9, 10]
Sum of the elements of the given list is: 55
```

8. Write a Python program which iterates the integers from 1to50. For multiples of three print "Fizz" instead of the number and for the multiples of five print "Buzz". For numbers which are multiples of both three and five print "Fizz Buzz". Example: fizz buzz 1 2 fizz 4 buzz

```
gvn_numbr = 50
for itr in range(1, gvn_numbr+1):
    if itr % 3 == 0 and itr % 5 == 0:
    print(itr, " - FizzBuzz")
    elif itr % 3 == 0:
        print(itr, " - Fizz")
    elif itr % 5 == 0:
```

```
print(itr, " - Buzz")
 else:
print(itr)
1
2
3 - Fizz
4
5 - Buzz
6 - Fizz
7
8
9 - Fizz
10 - Buzz
11
12 - Fizz
13
14
15 - FizzBuzz
16
17
18 - Fizz
19
20 - Buzz
21 - Fizz
22
23
24 - Fizz
25 - Buzz
26
27 - Fizz
28
29
30 - FizzBuzz
31
32
33 - Fizz
34
35 - Buzz
36 - Fizz
37
38
39 - Fizz
40 - Buzz
```

41

42 - Fizz 43 - FizzBuzz 45 - FizzBuzz 46 - Fizz 48 - Fizz

50 - Buzz

In []: