1. Find the datatype of these two declarations:

```
X=5
Y= "John"
```

Ans:

```
+ Code + Text

x=5
y="jhon"
print(type(x))
print(type(y))

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

2. Check whether the following syntax is valid or invalid for naming a variable.:

Example: abc=100 #valid syntax

- i. 3a=10
- ii. @abc=10
- iii. a100=100
- iv. \_a984\_=100
- v. a9967\$=100
- vi. xyz-2=100

Ans:

```
@abc=10#invalid syntax
a100=100#valid syntax
_a984_=100#valid syntax
a9967$=100#invalid syntax
xyz-2=100#invalid syntax
```

3. Check if elements exists in list in python:

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

1. Check if 3 exists or not.

Ans:

```
+ Code + Text

test_list=[1,6,3,5,3,4]
for i in test_list:
   if (i==3):
        print("Element exists")

Element exists
   Element exists
```

2. Check if 9 exists or not.

Ans:

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

Ans:

```
+ Code + Text

from datetime import date
Today=date.today()
print(Today)

2023-03-12
```

5. what is the output of the following code:

a. print 9//2

Ans:



b. print 9%2

Ans:



6. Print first 10 natural numbers using a while loop.

Ans:

```
\{x\}
              i=1
              while i<=10:
print(i)
                i+=1
             1
             2
             3
             4
             5
             6
             7
             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 output should be 55

```
(1+2+3+4+5+6+7+8+9+ 10)
```

ANS:

8. Write a python program which iterates the integers from 1 to 50.

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 "FizzBuzz".

Example:

FizzBuzz

1

Ans:

```
+ Code + Text
\equiv
            for fizzbuzz in range(51):
Q
              if fizzbuzz%3==0 and fizzbuzz%5==0:
                print("fizzbuzz")
                continue
\{x\}
               elif fizzbuzz%3==0:
                print("fizz")
continue
               elif fizzbuzz%5==0:
                print("buzz")
                continue
               print(fizzbuzz)
            fizzbuzz
            1
            2
            fizz
            4
            buzz
            fizz
            8
            fizz
            buzz
<>
            11
            fizz
\equiv
            13
            14
>_
            fizzbuzz

✓ 0s completed at 10:30 AM
```