```
#Q1. Find the datatype of these two declaration :
In [113...
           x = 5
          y = "john"
           print(x)
           print(y)
          5
          john
           #Q2. Check whether the following syntax is valid or invalid for naminga variable.
In [115...
           abc = 100;
 In [14]: 3a = 10;
            Cell In[14], line 1
               3a = 10;
          SyntaxError: invalid decimal literal
          @abc = 10;
 In [15]:
            Cell In[15], line 1
              @abc = 10;
          SyntaxError: invalid syntax. Maybe you meant '==' or ':=' instead of '='?
           a100 = 100;
 In [16]:
 In [18]:
           _a984_ = 100;
          a9967$ = 100;
 In [20]:
            Cell In[20], line 1
               a9967$ = 100;
          SyntaxError: invalid syntax
 In [24]: xyz-2 = 100;
            Cell In[24], line 1
               xyz-2 = 100;
          SyntaxError: cannot assign to expression here. Maybe you meant '==' instead of '='?
          #Q3Check if element exists in list in Python:
In [108...
           #Check if 3 exist or not.
           list= test_list = [1,6,3,5,3,4]
           print(test_list),
           for i in list:
               print(list)
```

```
print(list.count(3))
               #. Check if 9 exists or not.
               print(test_list.count(9))
          [1, 6, 3, 5, 3, 4]
          [1, 6, 3, 5, 3, 4]
          [1, 6, 3, 5, 3, 4]
          [1, 6, 3, 5, 3, 4]
          0
          [1, 6, 3, 5, 3, 4]
          0
          [1, 6, 3, 5, 3, 4]
          [1, 6, 3, 5, 3, 4]
          #Q4. Take the user input to print the current date.
In [110...
           import datetime
           now = datetime.datetime.now()
           print(now.strftime("%Y-%m-%d %H:%M:%S"))
           date = now.strftime("%Y-%m-%d")
          2023-07-18 16:37:07
          #Q5.what is the output of the following code :
In [111...
           #a. print 9//2
           x, y = 9, 2
           print(x // y)
           #b. print 9%2
           print(x % y)
          4
          1
In [112...
          #Q6.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
         8
         9
         10
In [12]: #7. Write a program to accept a number from a user and calculate
          x=1,2,3,4,5,6,7,8,9,10
          print(sum(x))
          n = int(input("Enter a number:"))
          s = 0
          for i in range(n+1):
              s+=i
              print("sum of all number from 1 to given number:",s)
         55
         Enter a number:10
         sum of all number from 1 to given number: 0
         sum of all number from 1 to given number: 1
         sum of all number from 1 to given number: 3
         sum of all number from 1 to given number: 6
         sum of all number from 1 to given number: 10
         sum of all number from 1 to given number: 15
         sum of all number from 1 to given number: 21
         sum of all number from 1 to given number: 28
         sum of all number from 1 to given number: 36
         sum of all number from 1 to given number: 45
         sum of all number from 1 to given number: 55
In [13]:
         #Q8 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.
          for i in range(1,51):
              if(i\%3==0 \text{ and } i\%5==0):
                  print("FizzBuzz")
              elif(i%3 == 0):
                  print("Fizz")
              elif(i%5 ==0):
                  print("Buzz")
              else:
                  print(i)
```

1 2 Fizz Buzz Fizz 7 8 Fizz Buzz 11 Fizz 13 14 FizzBuzz 16 17 Fizz 19 Buzz Fizz 22 23 Fizz Buzz 26 Fizz 28 29 FizzBuzz 31 32 Fizz 34 Buzz Fizz 37 38 Fizz Buzz 41 Fizz 43 44 FizzBuzz 46 47 Fizz

In []:

49 Buzz