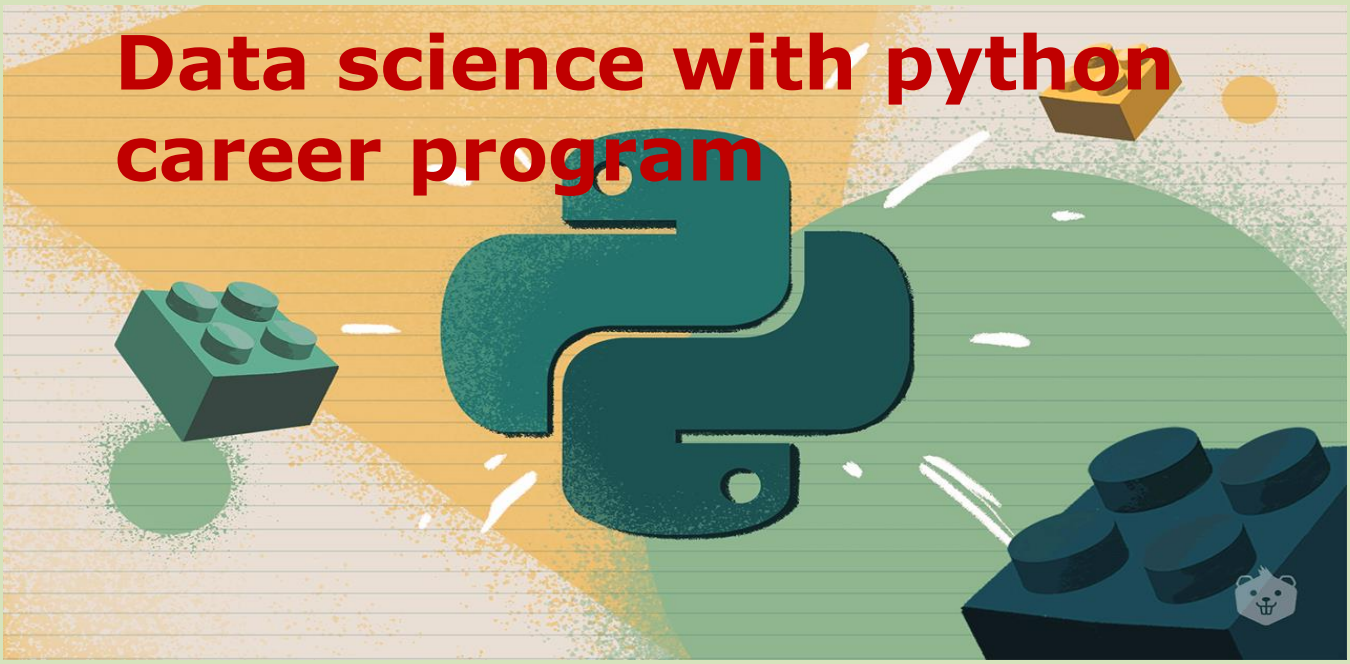

Assignment - Python [Major]

Major Assignment - 02

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23

03 MAR 2023

Assignment - Python [Major]

Q1) Find the datatype of these two declaration :

x = 5

y = "John"

Ans.1:-

```
x=5
y="John"
print("datatype of x= 5 is ",type(x))
print("datatype of y=""John"" is ",type(y))
```

```
#1. Find the data type of these two declaration:x=5 y="John"

x=5
y="John"
print("datatype of x= 5 is ",type(x))
print("datatype of y=""John"" is ",type(y))
```

[8] ✓ 0.1s

```
datatype of x= 5 is  <class 'int'>
datatype of y=John is  <class 'str'>
```

Q2) Check whether the following syntax is valid or invalid for naminga variable. :

Example: abc=100 # valid syntax

Ans.2:-

i)3a=10

```
#2. Check whether the following syntax is valid or invalid for naming a variable.:Example:abc=100#validsyntax
#i.3a=10 ,ii.@abc=10, iii. a100=100, iv._a984_=100, v.a9967$=100, vi.xyz-2=100
3a=10
print(3a)
# invalid syntax
```

[9] ⊗ 0.1s Python

```
  File "C:\Users\ANANT\AppData\Local\Temp\ipykernel_5592\2616624468.py", line 3
    3a=10
     ^
SyntaxError: invalid syntax
```

ii)@abc=10
iii)a100=100

```
@abc=10
print (@abc)
# invalid syntax
```

[10] 0.0s Python

```
  File "C:\Users\ANANT\AppData\Local\Temp\ipykernel_5592\2597519237.py", line 1
    @abc=10
         ^
SyntaxError: invalid syntax
```

```
a100=100
print(a100)
# valid syntax
```

[11] 0.1s Python

```
100
```

iv)_a984_=100
v)a9967$=100

```
_a984_=100
print(_a984_)
# valid syntax
```

[12] 0.1s Python

```
100
```

```
a9967$=100
print(a9967$)
# invalid syntax
```

[13] 0.0s Python

```
  File "C:\Users\ANANT\AppData\Local\Temp\ipykernel_5592\1811642419.py", line 1
    a9967$=100
          ^
SyntaxError: invalid syntax
```

vi)xyz-2=100

```
xyz-2=100
print (xyz-2)
# Syntax Error: cannot assign to operator
```

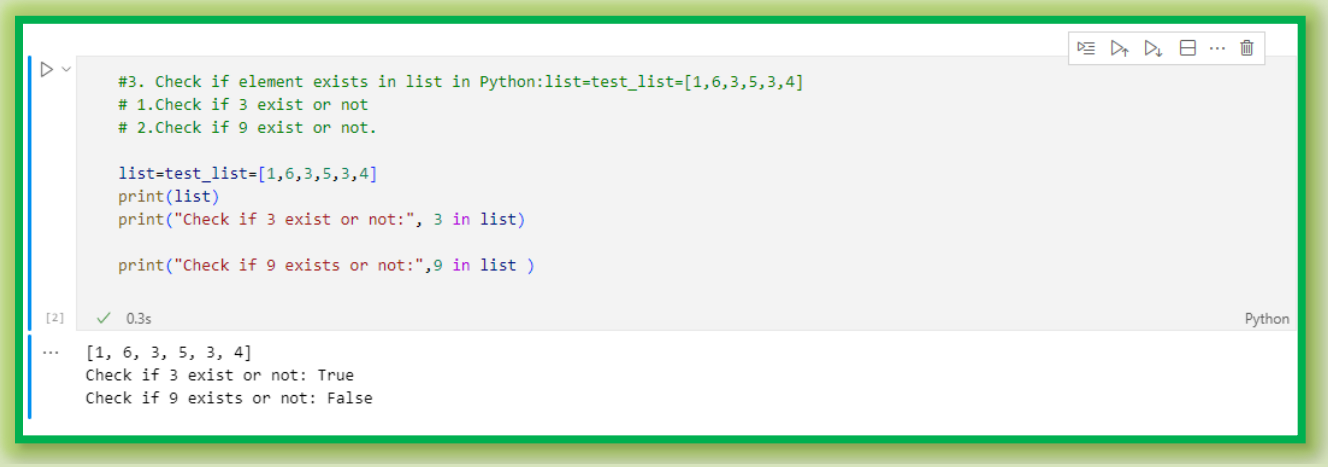
[14] 0.1s Python

```
  File "C:\Users\ANANT\AppData\Local\Temp\ipykernel_5592\591750844.py", line 1
    xyz-2=100
    ^
SyntaxError: cannot assign to operator
```

Q3). Check if element exists in list in Python :list = test_list = [1, 6, 3, 5, 3, 4]
i)Check if 3 exist or not.
ii)Check if 9 exists or not.

Ans.3:-

```
list=test_list=[1,6,3,5,3,4]
print(list)
print("Check if 3 exist or not:", 3 in list)

print("Check if 9 exists or not:",9 in list )
```



```
#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
# 2.Check if 9 exist or not.

list=test_list=[1,6,3,5,3,4]
print(list)
print("Check if 3 exist or not:", 3 in list)

print("Check if 9 exists or not:",9 in list )
```

[2] ✓ 0.3s Python

```
[1, 6, 3, 5, 3, 4]
Check if 3 exist or not: True
Check if 9 exists or not: False
```

Q4) Take the user input to print the current date.

Ans.4:-

```
from datetime import date ,datetime
day=int(input("Enter the today's date= "))
month=int(input("Enter the today's month= "))
year=int(input("Enter the today's year= "))
today=date(year,month,day)
print(today)
```

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

from datetime import date ,datetime
day=int(input("Enter the today's date= "))
month=int(input("Enter the today's month= "))
year=int(input("Enter the today's year= "))
today=date(year,month,day)
print(today)
```

[5] ✓ 9.1s Python

```
2023-03-11
```

Q5) what is the output of the following code :

a. print 9//2
b. print 9%2

Ans.5:-

```
print("9//2 =", 9//2)
print("9 %2 =", 9%2)
```

```
#5. what is the output of the following code:
# a.print9//2
# b.print9%2

print("9//2 =", 9//2)
print("9 %2 =", 9%2)
```

[22] ✓ 0.1s Python

```
9//2 = 4
9 %2 = 1
```

Q6) Print First 10 natural numbers using a while loop.

Ans.6:-

```
i=1
print("Print First 10 natural numbers using a while loop")
while i <=10:
    print(i,end=" ")
    i+=1
```

```
#6. Print First 10 natural numbers using a while loop.

i=1
print("Print First 10 natural numbers using a while loop")
while i <=10:
    print(i,end=" ")
    i+=1
```

[6] ✓ 0.1s Python

```
Print First 10 natural numbers using a while loop
1 2 3 4 5 6 7 8 9 10
```

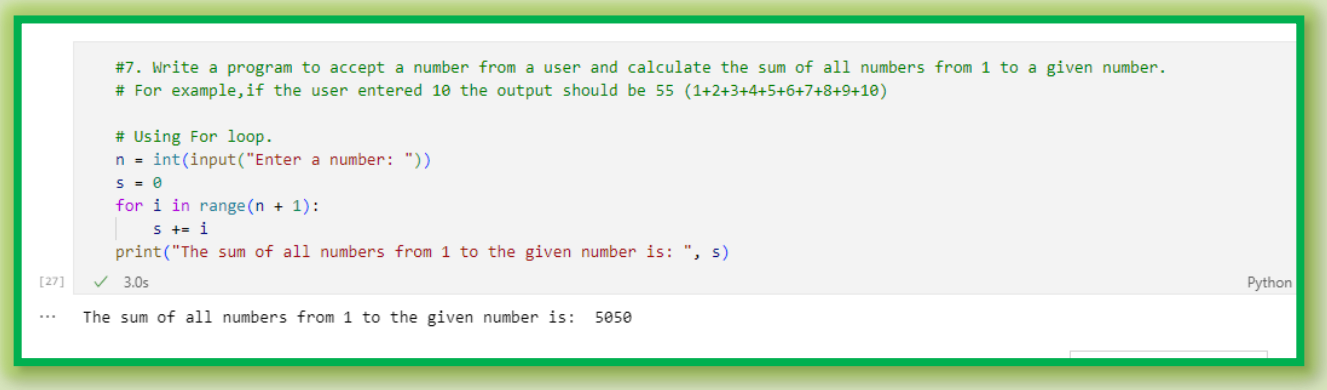
Q7) Write a program to accept a number from a user and calculate the sum of all numbers from 1 to a given number.

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

Ans.7:-

i)Using For loop.

```
n = int(input("Enter a number: "))
s = 0
for i in range(n + 1):
    s += i
print("The sum of all numbers from 1 to the given number is: ", s)
```



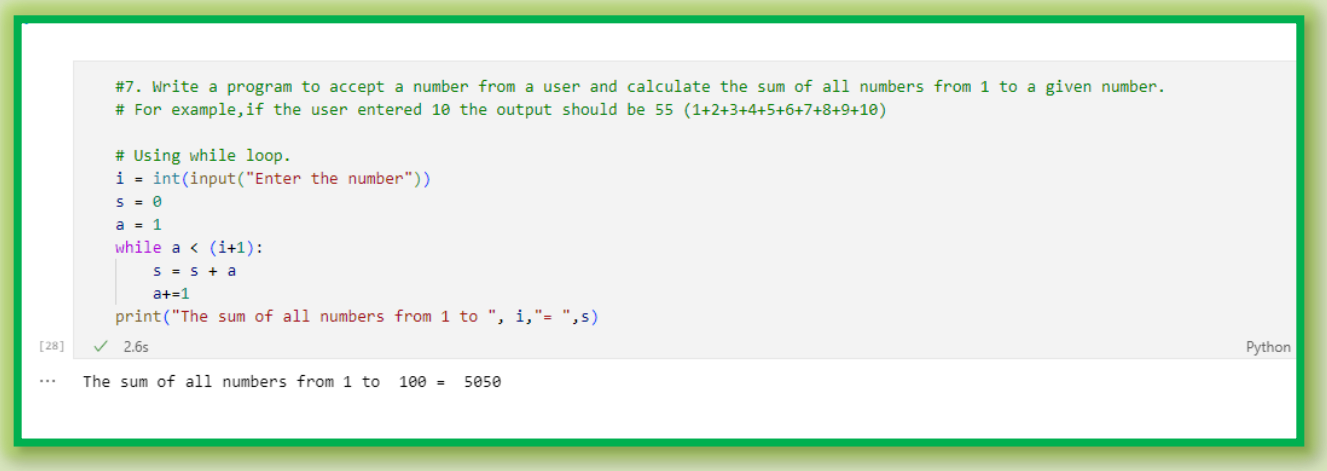
```
#7. Write a program to accept a number from a user and calculate the sum of all numbers from 1 to a given number.
# For example,if the user entered 10 the output should be 55 (1+2+3+4+5+6+7+8+9+10)

# Using For loop.
n = int(input("Enter a number: "))
s = 0
for i in range(n + 1):
    s += i
print("The sum of all numbers from 1 to the given number is: ", s)
```

[27] ✓ 3.0s Python

```
The sum of all numbers from 1 to the given number is:  5050
```

ii) Using while loop.

```
n = int(input("Enter the number"))
s = 0
a = 1
while a < (n+1):
    s = s + a
    a+=1
print("The sum of all numbers from 1 to ", n,"= ",s)
```



```
#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)

# Using while loop.
i = int(input("Enter the number"))
s = 0
a = 1
while a < (i+1):
    s = s + a
    a+=1
print("The sum of all numbers from 1 to ", i,"= ",s)
```

[28] ✓ 2.6s Python

```
The sum of all numbers from 1 to  100 =  5050
```

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".

Example : fizzbuzz 1 2 fizz 4 buzz

Ans.8:-

i)

```
# Python program to print Fizz Buzz
# Loop for 50 times i.e. range
for i in range(1,51):

    # Number divisible by 15,(divisible
    # by both 3 & 5), print 'FizzBuzz'
    # in place of the number
    if i % 15 == 0:
        print("FizzBuzz", end=" ")
        continue

    # Number divisible by 3, print 'Fizz'
    # in place of the number
    elif i % 3 == 0:
        print("Fizz", end=" ")
        continue

    # Number divisible by 5,
    # print 'Buzz' in
    # place of the number
    elif i % 5 == 0:
        print("Buzz", end=" ")
        continue

    # Print numbers
    print(i, end=" ")
```

```python
#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 2 fizz 4 buzz

# Python program to print Fizz Buzz
# Loop for 50 times i.e. range
for i in range(1,51):

    # Number divisible by 15,(divisible
    # by both 3 & 5), print 'FizzBuzz'
    # in place of the number
    if i % 15 == 0:
        print("FizzBuzz", end=" ")
        continue

    # Number divisible by 3, print 'Fizz'
    # in place of the number
    elif i % 3 == 0:
        print("Fizz", end=" ")
        continue

    # Number divisible by 5,
    # print 'Buzz' in
    # place of the number
    elif i % 5 == 0:
        print("Buzz", end=" ")
        continue

    # Print numbers
    print(i, end=" ")
```

[31] ✓ 0.1s Python

```
1 2 Fizz 4 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 49 Buzz
```

ii)

```python
for i in range(1,51):
    print ("the iterate value of ",i,"is",end="  ")
    if i%3 == 0 and i%5 ==0:
        print("fizzbuzz")
    elif i%3 == 0:
        print("fizz")
    elif i%5 == 0:
        print("buzz")
    else:
        print(i)
```

```python
#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 2 fizz 4 buzz

for i in range(1,51):
    print ("the iterate value of ",i,"is",end="  ")
    if i%3 == 0 and i%5 ==0:
        print("fizzbuzz")
    elif i%3 == 0:
        print("fizz")
    elif i%5 == 0:
        print("buzz")
    else:
        print(i)
```

[29] ✓ 0.1s Python

Welcome | Assignment - Python [Major] Solution.ipynb | *Assignment - Python [Major] Solution.ipynb (output)*

```
the iterate value of  1 is  1
the iterate value of  2 is  2
the iterate value of  3 is  fizz
the iterate value of  4 is  4
the iterate value of  5 is  buzz
the iterate value of  6 is  fizz
the iterate value of  7 is  7
the iterate value of  8 is  8
the iterate value of  9 is  fizz
the iterate value of  10 is  buzz
the iterate value of  11 is  11
the iterate value of  12 is  fizz
the iterate value of  13 is  13
the iterate value of  14 is  14
the iterate value of  15 is  fizzbuzz
the iterate value of  16 is  16
the iterate value of  17 is  17
the iterate value of  18 is  fizz
the iterate value of  19 is  19
the iterate value of  20 is  buzz
the iterate value of  21 is  fizz
the iterate value of  22 is  22
the iterate value of  23 is  23
the iterate value of  24 is  fizz
the iterate value of  25 is  buzz
the iterate value of  26 is  26
the iterate value of  27 is  fizz
the iterate value of  28 is  28
the iterate value of  29 is  29
the iterate value of  30 is  fizzbuzz
the iterate value of  31 is  31
the iterate value of  32 is  32
the iterate value of  33 is  fizz
the iterate value of  34 is  34
the iterate value of  35 is  buzz
the iterate value of  36 is  fizz
the iterate value of  37 is  37
the iterate value of  38 is  38
the iterate value of  39 is  fizz
the iterate value of  40 is  buzz
the iterate value of  41 is  41
the iterate value of  42 is  fizz
the iterate value of  43 is  43
the iterate value of  44 is  44
the iterate value of  45 is  fizzbuzz
the iterate value of  46 is  46
the iterate value of  47 is  47
the iterate value of  48 is  fizz
the iterate value of  49 is  49
the iterate value of  50 is  buzz

```


Thank
you