

Assignment Instructions

Hello Innominion,

- Try to attempt all the questions in every possible way.
- Some other topics are required to solve some questions. don't panic.
- Those questions can be answered after the topics are taught.
- Join Mentoring Session for the Support/Doubts Resolving with Our Technical Mentors (2.00 PM - 6.00 PM Mon-Sat)

Happy Learning !!!

Basics of Python

Question: Print your name

```
In [1]: print("my name is DineshReddy")
```

my name is DineshReddy

Question: What is a variable? Write a Few words about Variables. Create a Variable with an Example.

```
In [2]: var1="""variables are used to store the collection of data or values.  
1.variables used for store the value using assign(=) operater.  
2.variable values may be in the form of int,float,str it changeable if we change
```

```
In [3]: variable="1,2,3"  
print(variable)
```

1,2,3

Question: Assume that we execute the following assignment statements: width = 17 height = 12.0 delimiter = '.' For each of the following expressions, write the value of the expression and the type (of the value of the expression).

1. width/2
2. width/2.0
3. height/3

4. $1 + 2 * 5$
5. `delimiter * 5`

```
In [4]: # CODE HERE
width1=17/2
width2=17/2.0
height=12.0/3
value=1+2*5
delimiter='.'
v=delimiter*5
print(width1)
print(width2)
print(height)
print(value)
print(v)
```

```
8.5
8.5
4.0
11
.....
```

```
# Sample Outputs
1. width/2 = 8.5
2. width/2.0 = 8.5
3. height/3 = 4.0
4. 11
5. ....
```

Question: Add two number by taking variable names as first and second

```
In [5]: # CODE HERE
first=10
second=25
print(first+second)
```

```
35
```

```
In [6]: x=100
y=200
biodata="first number is:{},second number is:{},addition of two numbers are:{}".format(x,y,x+y)
biodata
```

```
Out[6]: 'first number is:100,second number is:200,addition of two numbers are:300'
```

Question: Add your first name and second name

```
In [7]: x="Dinesh"
        y="Kumar"
        biodata="first name is:{},second name is:{},full name is:{}".format(x,y,x+y)
        biodata
```

```
Out[7]: 'first name is:Dinesh,second name is:Kumar,full name is:DineshKumar'
```

Question: print the datatypes of the following

- 10,'10',True,10.5

```
In [8]: # CODE HERE
```

```
In [9]: x=-10
        y=10
        z=True
        r =10.5
        print(type(x))
        print(type(y))
        print(type(z))
        print(type(r))
```

```
<class 'int'>
<class 'int'>
<class 'bool'>
<class 'float'>
```

Question:

- num_int = 123
- num_str = "456"
- Add num_int and num_str

- hint: first need to convert num_str into integer

```
In [10]: # CODE HERE
```

```
In [11]: num_int1=123
        num_str="456"
        num_int2=int(num_str)
        print(num_int1+num_int2)
```

579

Advanced Questions

Question: The volume of a sphere with radius r is $\frac{4}{3}\pi r^3$. What is the volume of a sphere with radius 5?

In [12]:

```
v=4/3*3.14*5**3  
v
```

Out[12]: 523.3333333333334

Question: Suppose the cover price of a book is Rs.24.95, but bookstores get a 40% discount. Shipping costs Rs.3 for the first copy and 75 paise for each additional copy. What is the total wholesale cost for 60 copies?

In [13]: [CODE HERE](#)

```
print("Actual price=24.95")  
print("Discount=0.40%")  
print("After discount price=14.97")  
print("Shipping cost for single book=3")  
print("Remaining copies cost=0.75")  
print("Total wholesale cost for 60 copies=?")  
value1=14.97+3  
value2=(14.97+0.75)*59  
total_cost_of_copies="first copy cost {},fifty nine copies cost {},total cost of co  
total_cost_of_copies
```

```
Actual price=24.95  
Discount=0.40%  
After discount price=14.97  
Shipping cost for single book=3  
Remaining copies cost=0.75  
Total wholesale cost for 60 copies=?
```

Out[13]: 'first copy cost 17.97,fifty nine copies cost 927.48,total cost of copies 945.45'