

TASK 1:

NUMBERS AND VARIABLES

1. Create three variables in a single line and assign values to them in such a manner that each one of them belongs to a different data type.

```
a,b,c= 1,2.5,'ramya'
```

2. Create a variable of type complex and swap it with another variable of type integer.

```
#swapping complex with integer
a=2+3j
b=5
print(a,b)
a,b=b,a
print(a,b)
```

3. Swap two numbers using a third variable and do the same task without using any third variable.

```
#swapping numbers using third variable
a=5
b=10
print(a,b)
temp=a
a=b
b=temp
print(a,b)
```

```
#swapping numbers without using third variable
a=5
b=10
print(a,b)
a,b=b,a
print(a,b)
```

4. Write a program that takes input from the user and prints it using both Python 2.x and Python 3.x Version.

```
#input from user
var=input('enter a number')
print(var)
```

5. Write a program to complete the task given below:

Ask users to enter any 2 numbers in between 1-10 , add the two numbers and keep the sum in another variable called z. Add 30 to z and store the output in variable result and print result as the final output.

```
#sum of two variables
a=int(input('enter number1'))
b=int(input('enter number2'))
z=(a+b)
result=30+z
print(result)
```

6. Write a program to check the data type of the entered values.

HINT: Printed output should say - The data type of the input value is : int/float/string/etc

```
#check datatype of a variable
a=5
print(type(a))
b='ramya'
print(type(b))
```

7. Create Variables using formats such as Upper CamelCase, Lower CamelCase, SnakeCase and UPPERCASE.

(Refer: <https://capitalizemytitle.com/camel-case/>)

```
a= "HelloWorld" #UPPERCAMELCASE
b= "helloWorld" #LOWERCAMELCASE
c= "hello_world" #SNAKECASE
d= "HELLO WORLD" #UPPER
```

8. If one data type value is assigned to 'a' again. Will it change the value? If Yes then Why?

Solution: Yes, it will change the value because python stores value in the memory location and it will simply tag the variable to that memory location.