

6 .Write a program to check the data type of the entered values. HINT: Printed output should say - The input value data type is: int/float/string/etc

```
>>> a=eval(input("Enter the 'a' value:"))
Enter the 'a' value:34
>>> print("The input value data type is:",type(a))
The input value data type is: <class 'int'>
>>> b=eval(input("Enter the 'b' value:"))
Enter the 'b' value:2.5
>>> print("The input value data type is:",type(b))
The input value data type is: <class 'float'>
>>> c=eval(input("Enter the 'c' value:"))
Enter the 'c' value:1+4j
>>> print("The input value data type is:",type(c))
The input value data type is: <class 'complex'>
>>> d=eval(input("Enter the 'd' value:"))
Enter the 'd' value:'Janu'
>>> print("The input value data type is:",type(d))
The input value data type is: <class 'str'>
>>>
```

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

```
Pradeep@Pradeeps-MBP ~ $ python3
Python 3.8.1 (v3.8.1:1b293b6006, Dec 18 2019, 14:08:53)
[Clang 6.0 (clang-600.0.57)] on darwin
Type "help", "copyright", "credits" or "license" for more information.
>>> a=10
>>> id(a)
4449213360
>>> a='abc'
>>> id(a)
140703407005488
>>> a=10
>>> id(a)
4449213360
>>>
```

Yes, variable(a) will be assigned with new data type value. But values by itself won't be changed, because they will be allocated separate memory locations and they are immutable.

