# PROGRAM 4

**Aim:** Write a program to implement various types of data structures available in python and their operations.

## Code:

```
list = [1, "ananya", 1+1]
print(list)
list[1]
list.append("MODY UNIVERSITY")
print(list)
list.pop()
print(list)

dictionary = { 1:'a', 2:'b'}
print(dictionary)
print(dictionary.keys())
print(dictionary.values())
for index, value in enumerate(dictionary):
    print (index, value , dictionary[value])
for i in dictionary:
    print ("%d %s" %(i, dictionary[i]))
print(1 in dictionary)
del dictionary[1]
print(dictionary)
print(1 in dictionary)

tuple = (1,"ananya", 1+2)
print(tuple)
print(tuple[1])
tuple[2]

set = set()
for i in range(1,10):
    set.add(i)
print(set)
print("set =",set)
```

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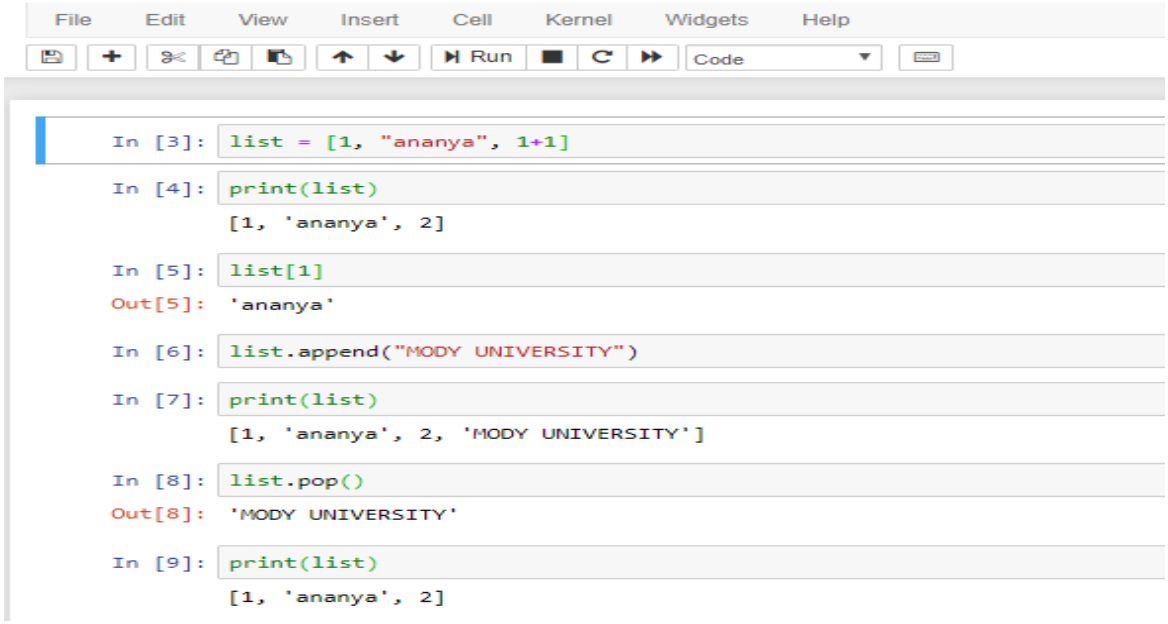
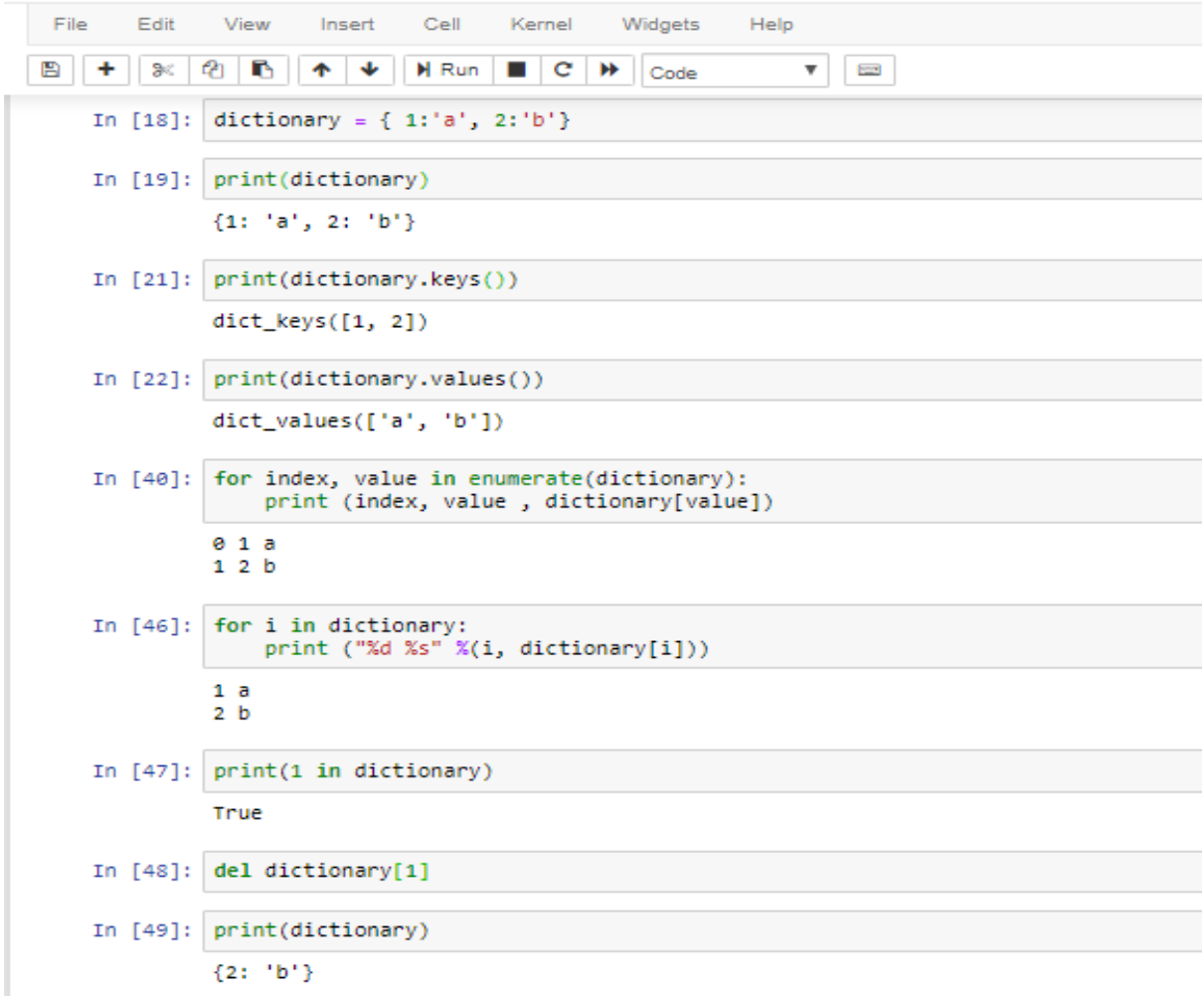
## Output:



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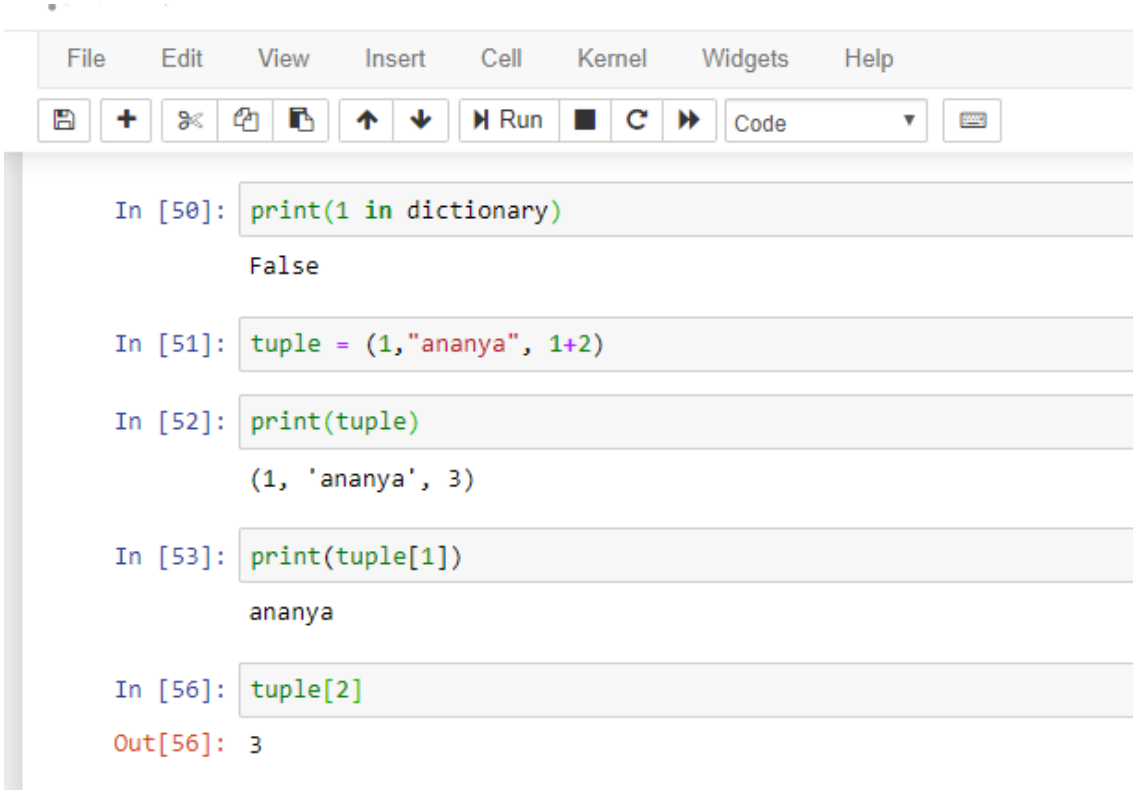
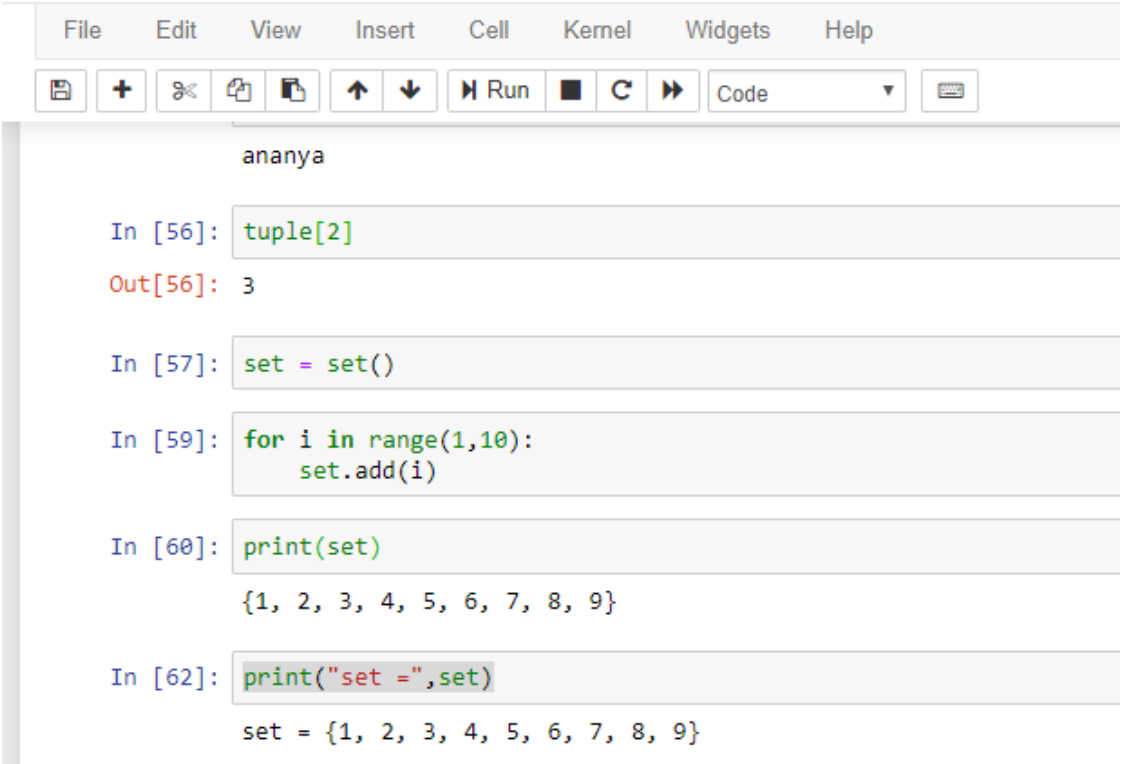

File Edit View Insert Cell Kernel Widgets Help
Run
Code
In [50]: print(1 in dictionary)
False
In [51]: tuple = (1,"ananya", 1+2)
In [52]: print(tuple)
(1, 'ananya', 3)
In [53]: print(tuple[1])
ananya
In [56]: tuple[2]
Out[56]: 3


File Edit View Insert Cell Kernel Widgets Help
Run
Code
ananya
In [56]: tuple[2]
Out[56]: 3
In [57]: set = set()
In [59]: for i in range(1,10):
set.add(i)
In [60]: print(set)
{1, 2, 3, 4, 5, 6, 7, 8, 9}
In [62]: print("set =",set)
set = {1, 2, 3, 4, 5, 6, 7, 8, 9}