

ASSIGNMENT – 3 : Intro to Python-2

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1) What happens if a duplicate key is entered during initialization of a dictionary?

If a duplicate key is entered then the entry is ignored by the dictionary.

2) Predict the output of the following :

```
list1 = [10, 20, 10, 2]
set1 = set(list1)
print(set1[0])
```

Output is an error, stating that sets do not supporting indexing of its elements.

3) Predict the output of the following :

```
d = (10, 20, 10, 2, 8)
d.pop(4)
print (d)
```

Output is an error, stating that tuples do not have a 'pop' attribute defined on them.

4) Predict the output of the following :

```
choco = 'choco'
print(set(choco*5))
```

Output : {'c', 'h', 'o'}

5) Write a function to generate 'n' Fibonacci numbers.

```
n=int(input("Enter value for n :\n"))
print("Fibonacci series :")
i=2;a=0;b=1;c=1
print(c)
if (n>1):
    print(c)
while i<n :
    a=b
    b=c
    c=a+b
    print(c)
    i+=1
```

6) Write an anonymous function that calculates square root of a number.

```
import math
a = int(input("Enter value : \n"))
sqr_root = lambda a : math.sqrt(a);
print(sqr_root(a))
```

7) Write a function to sort a dictionary by values. For example, a dictionary {1:3,7:1,2:4,5:2} should be sorted to {7:1,5:2,1:3,2:4}

```
def val(a):
    return d[a]
def sort_val(d):
    value = d.values()
    key = sorted(d, key = val)
    print('{',end='')
    for i in key:
        print(i,':',d[i],',',end = '')
    print('}')
```