Activity 1.29

#code 1

```
empty_set={}
print("Empty set : ",empty_set)
```

#output

```
[Running] python -u "c:\Users\user\Desktop\python\act1.29\1.py"
Empty set : {}
[Done] exited with code=0 in 1.216 seconds
```

#code 2

```
my_set={1, 3}
print(my_set)
my_set.add(2)
print(my_set)
my_set.update([2, 3, 4])
print(my_set)
my_set.update([4, 5], {1, 6, 8})
print(my_set)
my_set={1, 3}
print(my_set)
my_set.add(2)
print(my_set)
my_set.update([2, 3, 4])
print(my_set)
my_set.update([4, 5], {1, 6, 8})
print(my_set)
```

#output

```
[Running] python -u "c:\Users\user\Desktop\python\act1.29\tempCodeRunnerFile.py"
{1, 3}
{1, 2, 3}
{1, 2, 3, 4}
{1, 2, 3, 4, 5, 6, 8}
{1, 2, 3}
{1, 2, 3}
{1, 2, 3}
{1, 2, 3}
{1, 2, 3, 4}
{1, 2, 3, 4}
{1, 2, 3, 4, 5, 6, 8}
[Done] exited with code=0 in -17.376 seconds
```

#code 3

```
set1={1, 3, 4, 5, 6}
print(set1)

set1.discard(4)
print(set1)

set1.discard(6)
print(set1)

set1.discard(2)
print(set1)
```

```
[Running] python -u "c:\Users\user\Desktop\python\act1.29\3.py"
{1, 3, 4, 5, 6}
{1, 3, 5, 6}
{1, 3, 5}
Traceback (most recent call last):
   File "c:\Users\user\Desktop\python\act1.29\3.py", line 28, in <module>
        set1.remove(2)
KeyError: 2

[Done] exited with code=1 in 0.572 seconds
```

#code 4

```
A={1, 2, 3, 4, 5}
B={4, 5, 6, 7, 8}
print(A | B)
```

#output

```
[Running] python -u "c:\Users\user\Desktop\python\act1.29\tempCodeRunnerFile.py"
{1, 2, 3, 4, 5, 6, 7, 8}
[Done] exited with code=0 in 1.561 seconds
```

#code 5

```
A={1, 2, 3, 4, 5}
B={4, 5, 6, 7, 8}
print(A.union(B))
print(B.union(A))
```

#output

```
[Running] python -u "c:\Users\user\Desktop\python\act1.29\tempCodeRunnerFile.py"
{1, 2, 3, 4, 5, 6, 7, 8}
{1, 2, 3, 4, 5, 6, 7, 8}
[Done] exited with code=0 in 1.071 seconds
```

#code 6

```
A={1, 2, 3, 4, 5}
B={4, 5, 6, 7, 8}
print(A & B)
```

```
[Running] python -u "c:\Users\user\Desktop\python\act1.29\6.py"
{4, 5}
[Done] exited with code=0 in 0.595 seconds
```

#code 7

```
A={1, 2, 3, 4, 5}
B={4, 5, 6, 7, 8}
print(A - B)
```

#output

```
[Running] python -u "c:\Users\user\Desktop\python\act1.29\tempCodeRunnerFile.py"
{1, 2, 3}
[Done] exited with code=0 in 0.727 seconds
```

#code 8

```
A={1, 2, 3, 4, 5}
B={4, 5, 6, 7, 8}
print(A ^ B)
```

#output

```
[Running] python -u "c:\Users\user\Desktop\python\act1.29\tempCodeRunnerFile.py"
{1, 2, 3, 6, 7, 8}
[Done] exited with code=0 in 0.545 seconds
```

#code 9

```
set1={10, 20, 30, 40, 50, 60}
print("The Original Set : ",set1)
print("Maximum Number in Set : ",max(set1))
print("Minimum Number in Set : ",min(set1))
print("The Sorted List : ",sorted(set1))
print("The Sum of the List : ",sum(set1))
```

```
[Running] python -u "c:\Users\user\Desktop\python\act1.29\9.py"
The Original Set : {40, 10, 50, 20, 60, 30}
Maximum Number in Set : 60
Minimum Number in Set : 10
```

```
The Sorted List: [10, 20, 30, 40, 50, 60]
The Sum of the List: 210

[Done] exited with code=0 in 0.586 seconds
```

#code 10

```
set1={"AKSHAT",18,"VIT","CSE1011"}
print(set1)
set2=set1.copy()
print(set2)
print("\n")
set3={"APPLE", "BANANA", "CHERRY", "WATERMELON", "PAPAYA"}
print(set3)
set4={"LEMON", "BANANA", "APPLE", "CHERRY", "TOMATO"}
print(set4)
set5=set3.difference(set4)
print(set5)
print("\n")
set6={1, 2, 3, 4, 5}
print(set6)
set7={1, 5, 6, 7, 8, 9, 10}
print(set7)
set8=set6.intersection(set7)
print(set8)
print("\n")
set9={10, 20, 30, 40, 50}
print(set9)
set10={30, 50, 60, 70, 80}
print(set10)
set9.intersection update(set10)
print(set9)
print("\n")
set11={"A","B","C","D","E","F"}
print(set11)
set12={"G","H","I","J","K","L"}
print(set12)
set13=set11.isdisjoint(set12)
```

```
print(set13)
print("\n")

set14={"VIT","IIT","SRM","BITS","LPU"}
print(set14)
set15={"VIT"}
print(set15)
set16=set14.issuperset(set15)
print(set16)
print("\n")
```

```
[Running] python -u "c:\Users\user\Desktop\python\act1.29\10.py"
{'VIT', 18, 'AKSHAT', 'CSE1011'}
{'VIT', 18, 'AKSHAT', 'CSE1011'}
{'APPLE', 'PAPAYA', 'BANANA', 'WATERMELON', 'CHERRY'}
{'APPLE', 'BANANA', 'LEMON', 'TOMATO', 'CHERRY'}
{'PAPAYA', 'WATERMELON'}
\{1, 2, 3, 4, 5\}
\{1, 5, 6, 7, 8, 9, 10\}
\{1, 5\}
{40, 10, 50, 20, 30}
{70, 80, 50, 60, 30}
{50, 30}
{'C', 'E', 'D', 'A', 'F', 'B'}
{'L', 'J', 'K', 'I', 'G', 'H'}
True
{'VIT', 'LPU', 'IIT', 'BITS', 'SRM'}
{'VIT'}
True
[Done] exited with code=0 in 0.327 seconds
```