Asignments 4

Set Operators

Union

In [34]:
```
a={1,2,3,4,5,6,7}
b={6,7,8,9}
c={9,10,11,}
```

In [35]:
```
a|b|c
```

Out[35]:
```
{1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11}
```

In [36]:
```
a.union(b)
```

Out[36]:
```
{1, 2, 3, 4, 5, 6, 7, 8, 9}
```

In [37]:
```
b.union(c)
```

Out[37]:
```
{6, 7, 8, 9, 10, 11}
```

In [38]:
```
print(a)
print(b)
print(c)
```

```
{1, 2, 3, 4, 5, 6, 7}
{8, 9, 6, 7}
{9, 10, 11}
```

intersection

In [39]:
```
print(a)
print(b)
print(c)
```

```
{1, 2, 3, 4, 5, 6, 7}
{8, 9, 6, 7}
{9, 10, 11}
```

In [40]:
```
a.intersection(b)
```

Out[40]:
```
{6, 7}
```

In [41]:
```
b.intersection(c)
```

Out[41]:
```
{9}
```

In [42]:
```
a.intersection(c)
```

Out[42]:
```
set()
```

In [43]:
```
a & b
```

Out[43]:
```
{6, 7}
```

In [44]:
```
b & c
```

Out[44]:
```
{9}
```

Difference

In [45]:
```
a.difference(b)
```

Out[45]:
```
{1, 2, 3, 4, 5}
```

In [46]:
```
a -b
```

Out[46]:
```
{1, 2, 3, 4, 5}
```

In [47]:
```
a-c
```

Out[47]:
```
{1, 2, 3, 4, 5, 6, 7}
```

In [48]:
```
c-a
```

Out[48]:
```
{9, 10, 11}
```

In [49]:
```
print(a)
print(b)
print(c)
```

```
{1, 2, 3, 4, 5, 6, 7}
{8, 9, 6, 7}
{9, 10, 11}
```

In [50]:
```
a.symmetric_difference(b)
```

Out[50]:
```
{1, 2, 3, 4, 5, 8, 9}
```

In [51]:
```
a.symmetric_difference_update(b)
```

In [52]:
```
a
```

Out[52]:
```
{1, 2, 3, 4, 5, 8, 9}
```

superset,subset and disjoint

In [53]:
```
d={1,2,3,4,5,6,7,8,9,10}
e={3,4,5,6,7,8,9}
f={11,12,13,15}
```

In [54]:
```
e.issubset(a)
```

Out[54]: False

In [55]:
```
d.issuperset(e)
```

Out[55]: True

In [56]:
```
f.isdisjoint(d)
```

Out[56]: True

In [57]:
```
f.isdisjoint(e)
```

Out[57]: True

In [ ]:
```

```

In [ ]:
```

```