

a. $c = (a \cup b)$

```
c = new HashSet();
c.addAll(a);
c.addAll(b);
```

b. $c = (a \cap b)$

```
c = new HashSet();
c.addAll(a);
c.retainAll(b);
```

c. $c = (a - b)$

```
c = new HashSet();
c.addAll(a);

c.removeAll(b);
```

d. if $(a \subset b)$

```
    c = a;
else
    c = b;
```

```
if (b.containsAll(a))
{
    c = a
}
else
{
    c = b
}
```

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//we'll say the data is Integers

```
public String toString()
{
    String all = "[";
    for(Integer item: theSet)
    {
        all = all + item;
    }
    all = all + " ]";
    return all;
}
```