Arrays:

1.
```java
class SDemo1
{
        public static void main(String args[])
        {
                int a[];
                a=new int[3];

                a[0]=100;
                a[1]=200;
                a[2]=300;

                int v;
                for(int i=0;i<a.length;i++)
                {
                        v=a[i];
                        System.out.println("   "+v);
                }
        }
}
```

2.
```java
class SDemo2
{
        public static void main(String args[])
        {
                int a[]=new int[3];

                a[0]=100;
                a[1]=200;
                a[2]=300;

                int v;

                for(int i=0;i<a.length;i++)
                {
                        v=a[i];
                        System.out.println("   "+v);
                }
        }
}
```

3.
```java
class SDemo3
{
        public static void main(String args[])
        {
                int a[]=new int[10];

                int value=100;

                for(int i=0;i<a.length;i++)
                {
                        a[i]=value;
                        value+=50;
                }

                int v;
                for(int j=0;j<a.length;j++)
                {
                        v=a[j];
                        System.out.println("   "+v);
                }
        }
}
```

4.
```java
class SDemo4
{
        public static void main(String args[])
        {
                int a[]={10,20,30,40,50,60,70,80};

                int v;
                for(int i=0;i<a.length;i++)
                {
                        v=a[i];
                        System.out.println("   "+v);
                }
        }
}
```

5.
```java
class A
{
        int x;
```

```java
        void add()
        {
                System.out.println(" X  : "+x);
        }
}
class B extends A
{
        int y;
        void sum()
        {
                System.out.println(" Y  : "+y);
        }
}
class SDemo5
{
        public static void main(String args[])
        {
                A s1=new A();
                s1.x=100;

                B s2=new B();
                s2.x=200;
                s2.y=300;

                A ob[]=new A[2];

                ob[0] = s1;
                ob[1] = s2;    // A ss1 = s2;

                ob[0].add();
                ob[1].add();

                System.out.println("-------------------------------------");

                B s3=(B)ob[1]; // B ss2 = (B) ss1;

                s3.add();
                s3.sum();
                System.out.println("-------------------------------------");
```

```
        }
}
```