Program :

```
package CollectiionProg;

import java.util.Vector;

public class VectorProg2 {

	public static void main(String[] args) {

		Vector v1 = new Vector();      //CC = 10 = 20 = 40 = 80
		Vector v2 = new Vector(500);   //CC = 500 = 1000 = 2000
		Vector v3 = new Vector(20,11); //CC = 20 + 11 = 31 + 11 = 42
		Vector v4 = new Vector(v1);

		System.out.println(v3);
		System.out.println("Capacity of V1 = " + v1.capacity());
		System.out.println("Capacity of V2 = " + v2.capacity());
		System.out.println("Capacity of V4 = " + v4.capacity());
		System.out.println("Capacity of V3 = " + v3.capacity());
		for(int i=0;i<20;i++)
			v3.add(i);
		System.out.println("Capacity of V3 = " + v3.capacity());
		v3.add("ABC");
		System.out.println("Capacity of V3 after growing = " + v3.capacity());

		v1.add("Ron");
		v1.add(100);
		v1.add(1.222);
		v1.add('c');
		v1.addElement(1000);
		System.out.println(v1);
		v1.remove(0);
		v1.removeElement(1);
		v1.set(0, 100000);
		v1.setElementAt(1, 11);
		v1.setElementAt(11, 1);
		v1.add("Ron");
		v1.add(100);
		v1.add(1.222);
		v1.add('c');
		v1.addElement(1000);
		System.out.println(v1);
		//Amol - Amu  Ramkishan    aaaaaaa

		System.out.println("-----------------------------");
		for(Object value : v1)
			System.out.println(value);
	}
}
```

Array List	Vector
Non synchronized	Synchronized
Non thread safe	thread safe
Performance is high	low
Non legacy	legacy

Program :

```
package SimpleJavaProg1;

public class ReturnMethod1 {

	public static void m1()
	{
		System.out.println("This is m1 method");
	}
	public void m2()
	{
		System.out.println("This is m2 method");
	}

	public static int m3()
	{
		return 11;
	}

	public static int sum(int num1, int num2)
	{
		return num1+num2;
	}

	public static void main(String[] args) {

//		ReturnMethod1 a = new ReturnMethod1();
//		a.m2();
//		m1();

		int mf = 100;
		int out = m3();
		int foutput = mf * out;
		System.out.println(foutput);

//		int output = m3();  //m3() method returning 11
//		System.out.println(output);
//
//		System.out.println("M3 returning  = " + m3());
	}

}
```