1-)

```
import java.util.*;
public class sort {

	public static void main(String[] args) {
		Scanner sc=new Scanner(System.in);
		String[] str= new String[5];
		for(int i=0;i<5;i++) {
			String s=sc.nextLine();
			str[i]=s;
		}
		bubbleSort(str);
		for(int i=0;i<5;i++) {
			System.out.println(str[i]);
		}


	}

	public static void bubbleSort(String[] str) {
		String temp;
		for(int i=0;i<4;i++) {
			for(int j=i+1;j<5;j++) {
				if(str[j].compareTo(str[i])<0) {
					temp=str[j];
					str[j]=str[i];
					str[i]=temp;
				}
			}
		}
	}
}
```

```
import java.util.*;
public class sort {

	public static void main(String[] args) {
		Scanner sc=new Scanner(System.in);
		String[] str= new String[5];
		for(int i=0;i<5;i++) {
```

```
                        String s=sc.nextLine();
                        str[i]=s;
                }
                insertionSort(str);
        }

        public static void insertionSort(String[] str) {
                for(int i=1;i<5;i++) {
                        String temp=str[i];
                        int j=i-1;
                        while(j>=0) {
                                if(temp.compareTo(str[j])>0) {
                                        break;
                                }
                                str[j+1]=str[j];
                                j--;
                        }
                        str[j+1]=temp;
                }
                for(int i=0;i<5;i++) {
                System.out.println(str[i]);
                }
        }
}
```

2-)

```
import java.util.*;
class initials {

        static void printInitials(String name)
        {
                if (name.length() == 0)
                        return;
                String words[] = name.split(" ");
                for(String word : words) {

System.out.print(Character.toUpperCase(word.charAt(0)) + " ");
                }
        }
        public static void main(String args[])
```

```
		{
			Scanner sc=new Scanner(System.in);
	String name=sc.nextLine();
			printInitials(name);
		}
}
```

3-)

```
import java.util.*;
class password
{
 public static void main(String[] args)
 {
   String n;
   Scanner c=new Scanner(System.in);
   System.out.print("Enter your full name:");
   n=c.nextLine();
   System.out.print("Enter your age:");
   int age=c.nextInt();
   String [] t=n.split(" ");
   int l=t.length;
   System.out.print("Your password is:");
   for(int i=0;i<l-1;i++)
  {
   System.out.print(t[i].charAt(0)+"_");
  }
    System.out.print(t[l-1]+"@"+age);
 }
}
```

4-)

```
import java.util.*;
public class swap {

		public static void main(String[] args) {
			Scanner sc=new Scanner(System.in);
			String s1=sc.nextLine();
			String s2=sc.nextLine();
			String str[]=s1.split(" ");
```

```
                String str1[]=s2.split(" ");
                String temp=str[str.length-1];
                str[str.length-1]=str[0];
                str[0]=temp;
                String temp1=str1[str1.length-1];
                str1[str1.length-1]=str1[0];
                str1[0]=temp1;
                String first=Arrays.toString(str);
                String second=Arrays.toString(str1);
                System.out.println(first);
                System.out.println(second);


        }

}
```

5-)

```
import java.util.*;
public class usn {

        public static void main(String[] args) {
                Scanner sc=new Scanner(System.in);
                String s=sc.nextLine();

                int l=s.length();
                char[] ch=new char[l];
                 for (int i = 0; i < l; i++) {
               ch[i] = s.charAt(i);
            }
                if(l==10 && (ch[0]>=48 && ch[0]<=57 && (ch[0]=='1'||ch[0]=='2')
&& Character.isUpperCase(ch[1]) && Character.isUpperCase(ch[2]) && ch[3]>='0' &&
ch[3]<='9' && ch[4]>='0' && ch[4]<='9' && Character.isUpperCase(ch[5]) &&
Character.isUpperCase(ch[6]) && (ch[5]=='C'&&ch[6]=='S') &&
ch[7]>='0'&&ch[7]<='9'&&ch[8]>='0'&&ch[8]<='9'&&ch[9]>='0'&&ch[9]<='9')){
                        System.out.println("Succes");
                }
                else {
                        System.out.println("Failure");
                }
```

```
            }

}
```

6-)

```
public class usn {
   static String reverseWords(String inputString) {
   String[] words = inputString.split(" ");

   String reverseString = "";

   for (int i = 0; i < words.length; i++)
   {
      String word = words[i];

      String reverseWord = "";

      for (int j = word.length()-1; j >= 0; j--)
      {
         reverseWord = reverseWord + word.charAt(j);
      }

      reverseString = reverseString + reverseWord + " ";
   }
   return reverseString;
}
public static void main(String[] args)
{
   String str1 = "1 cup of hot coffee costs 8.00, whereas cold coffee costs 45.00.";
   System.out.println(reverseWords(str1));

   String str2 = "It Costs 25000rs for 1 LCD Projector.";
   System.out.println(reverseWords(str2));

   String str3 = "8990.33";
   System.out.println(reverseWords(str3));
}
}
```

7-)

```
class usn {

	static void printRLE(String s)
	{
		String s1=s.toLowerCase();
		for (int i = 0; i < s1.length(); i++) {
			int count = 1;
			while (i + 1 < s1.length() && s1.charAt(i) == s1.charAt(i
+ 1)) {
				i++;
				count++;
			}
			System.out.print(s1.charAt(i)+ "" + count + " ");
		}

		System.out.println();
	}
	public static void main(String args[])
	{
		printRLE("aAbccccccaaA");
		printRLE("BBBBbbb");
	}
}

8-)
import java.util.Arrays;
class usn {
   static int count_Triplets(int[] A, int N){
    int count = 0;
    Arrays.sort(A);
    for(int i = 0; i < N; i++){
      for(int j = i + 1; j < N; j++){
        for(int k = j + 1; k < N; k++){
          if(A[i] + A[j] == A[k]){
              System.out.println(A[i]+","+A[j]+","+A[k]);
              count++;
          }
        }
      }
    }
```

```
    return count;
  }

        public static void main(String args[]) {
                int[] A = {1, 2, 3, 4, 5,7,9};
                int N = A.length;
                System.out.print(count_Triplets(A, N));
        }
}
```