AIM:	To solve problem regarding Package.
Program 1	
PROBLEM STATEMENT :	Create a package with class Reverse_String. Write a function called ReversIt() that reverses a string. It swaps the first and last characters, then the second and next-to-last characters, and so on. The string should be passed to reversit() as an argument. Write a program to exercise reversit(). Class Check get a string from the user, call reversit(), and print out the result. Use an input method that allows embedded blanks. Test the program with Napoleon's famous phrase, "Able was I ere I saw Elba."

PROGRAM:	→ Package
	package mypac;
	public class Reverse_String{
	public String ReversIt(String s){
	String s1="";
	for(int i=s.length()-1;i>=0;i--){
	s1+=s.charAt(i);
	}
	return s1;
	}
	}
	→ Main File
	import mypac.*;
	import java.util.Scanner;
	class myclass{
	public static void main(String[] args){
	Scanner sc=new Scanner(System.in);
	Reverse_String s1=new Reverse_String();
	System.out.print("Enter a sentence: ");
	String s=sc.nextLine();
	System.out.println(s1.ReversIt(s));
	}
	}

RESULT:	Enter a sentence: *Able was I ere I saw Elba* ablE was I ere I saw elbA
Program 2	
PROBLEM STATEMENT :	A Package implements stack operations: a.Push b. Pop Write a user defined exception to check whether the stack is full or empty.

PROGRAM:

→ Package

```
package p1;
import java.util.Scanner;
public class s1{
   Scanner sc=new Scanner(System.in);
   public void push(int[] arr){
      if(stacklen(arr)==4){
         System.out.println("Stack full");
      }
      else{
         System.out.println("Enter the element not 0");
         int n=sc.nextInt();
         while(n==0){n= sc.nextInt();}
         arr[indexof(arr)]=n;
      }
   }
   public void pop(int[] arr){
      if(stacklen(arr)==0){
         System.out.println("empty");
      }
      else{
         int n=indexof(arr);
         if (n>0)
            arr[n-1]=0;
         else
            System.out.println("error");
      }
   }
   int stacklen(int[] arr){
      int len=0;
      for(int i=0;i<arr.length;i++){
         if(arr[i]!=0)
            len++;
      }
      return len;
   }
   int indexof(int[] arr){
      for(int i=0;i<arr.length;i++){
         if(arr[i]==0)
            return i;
      }
      return -1;
   }
   public void display(int[] arr){
```

```
        for(int i=0;i<stacklen(arr);i++){
            System.out.print(arr[i]+" ");
        }
        System.out.println();
    }
}
```

→ Main File

```
import p1.s1;
import java.util.Scanner;
class newmain{
    public static void main(String[] args){
        Scanner sc=new Scanner(System.in);
        int i=0;
        int[] arr=new int[5];
        while(i<5){
            System.out.println("1) Push\t2) Pop");
            int option =sc.nextInt();
            s1 s =new s1();
            if(option==1){
                s.push(arr);
                s.display(arr);
                i++;
            }
            else if(option==2){
                s.pop(arr);
                s.display(arr);
                i++;
            }
            else{System.out.println("Wrong option");}
        }
        System.out.println("");
    }
}
```

RESULT:

```
1) Push 2) Pop
1
Enter the element not 0
0
0
12
12
1) Push 2) Pop
1
Enter the element not 0
34
12 34
1) Push 2) Pop
1
Enter the element not 0
234
12 34 234
1) Push 2) Pop
2
12 34
1) Push 2) Pop
2
12
```

CONCLUSION:	We learned to solve problems on package and applied on some problems.