

SOLUTION**Section - A**

1. (a) No, we cannot declare a top-level class as private.
(b) (i) `System.out.println (S.lastIndexOf (' '));`
(ii) `double a = Double.parseDouble (x);`
(c) No, we cannot assign
(d) `st - st.replaceAll ("//S", " ");`
(e) 0

2. (a) (i) String to integer -
`int r = Integer.parseInt (str 1);`
Or
`int r = Integer.valueOf (str 1);`
(ii) Integer to string.
`String str 2 = string. valueOf (x);`
(b) Sorting :- Sorting is a method to arrange the elements of an array in either ascending or descending order.
Searching :- Searching is used to search an element in an array.
(c) The data type that represents a number of similar or different data under single declaration is called as composite data type. An array is a group or a collection of same type of variables. Hence, array is a composite data type.
(d) 979899100101
(e) We can check whether a string is palindrome or not by comparing the first character of string by the last character. If both are same, then the string is a polindrome.
eg. MADAM, LIRIL etc.
For this, we extract every character using `.charAt()` function.

Time : 2 Hours.

M.M.: 50

Section - B

```

3.  import java.util. * ;
    class convert
    {
    public static void main ( )
    {
    int ch ;
    Scanner sc = new Scanner (system.in);
    System.out.println ("Enter your choice  /n
    1.  Display upper case letters Z to A  /n
    2.  Display lower case letters a to z ") ;
    ch = sc.nextInt ( ) ;
    switch (ch)
    {
    case 1 :
    for (int i = 91; i >= 65; i --)
    {
    System.out.println ((char)(i));
    }
    break;

    case 2 :
    for (int i = 97; I <= 122 ; i + +)
    {
    System.out.println ((char)(i));
    }
    break;
    default:
    System.out.println ("you entered a wrong choice");
    }
    }
    }

```

Variable description

Variable	data type	description
i	int	loop variable
ch	int	to enter the choice from user

```

4.  import java.util.* ;
    class calculate
    {
    public static void main ( )
    {
    int Roll [ ] = new int [100] ;
    String Name [ ] = new string [100];
    int M1 [ ] = new int [100];
    int M2 [ ] = new int [100];
    in M3 [ ] = new int [100];
    in M4 [ ] = new int [100];
    int M5 [ ] = new int [100];
    int M6 [ ] = new int [100];
    int total ;
    double per ;
    Scanner sc = new Scanner (System. in);
    System.out.println ("Enter the Roll no and names of students");
    for (i = 0; i < 100 ; i ++ )
    {
    Roll [i] = sc.nextInt ( );
    Name [i] = sc.readLine();
    }
    System.out.println ("Enter the marks of Maths, Physics, Chemistry, Biology, English");
    for (i = 0; i < 100; i ++ )
    {
    M1 [i]    = sc.nextInt( );
  
```

Time : 2 Hours.

M.M.: 50

```

M2 [i]    = sc.nextInt();
M3 [i]    = sc.nextInt();
M4 [i]    = sc.next Int();
M5 [i]    = sc.nextInt ();
M6 [i]    =sc.nextInt();
}
for (i = 0; i < 100 ; i ++ )
{
total = M1[i] + M2[i] + M3[i] + M4[i] + M5[i] + M6[i];
per = total / 6;
if (per > = 80 & per < = 100)
Sopln ("grade is A")'
else if (per > = 60 & & per < = 79)
Sopln ("grade is B");
else if (per > = 40 && per < = 59)
Sopln ("grade is C");
else if (per < 40)
Sopln ("grade is D");
total = 0 ;
per = o.od;
}

```

```

5.  import java.util *;
    class candidate
    {
    private long RNO;
    private String Name;
    private float Score;
    private String Remarks ;
    private void assignrem (float scr)
    {
    if (Scr > = 50)

```

Time : 2 Hours.

M.M.: 50

```
Sopln ("Selected");
else
Sopln ("Not selected");
}
public void Enter ()
{
Sopln ("Enter the Roll no, Name, and Score");
RNO = sc.nextlong ();
Name = sc.readLine ();
Score = sc.nextFloat ();
Candidate obj = new candidate ();
obj.assignment (score);
}
public void DISPLAY ()
{
Sopln ("Role No. = " + RNO);
Sopln ("Name = "+ Name);
Sopln ("Score = "+ Score);
}
public static void main ()
}
Candidate obj 1 = new candidate();
obj 1. Enter ();
obj 1. DISPLAY ()
}
}
```