Output:

Enter valid number of students:-5

Enter valid number of students:0

Enter valid number of students:22

Enter valid number of students:5

-----Student1----

Roll\_no.:101

Name:

abcd abcd abcd

Enter marks of 5 subjects:

\*\*Subject 1:\*\*

Credit:5

Grade:

10

\*\*Subject 2:\*\*

Credit:5

Grade:

10

\*\*Subject 3:\*\*

Credit:5

Grade:

10

\*\*Subject 4:\*\*

Credit:6

Credit should be in range of 1 to 5

Credit:4

Grade:

9

\*\*Subject 5:\*\*

Credit:4

Grade:

19

Grade should be in range 1 to 10

Grade:

9

-----Student2----

Roll\_no.:103

Name:

pqrs pqrs pqrs

Enter marks of 5 subjects:

\*\*Subject 1:\*\*

Credit:3

Grade:

7

\*\*Subject 2:\*\*

Credit:3

Grade:

7

\*\*Subject 3:\*\*

Credit:2

Grade:

7

\*\*Subject 4:\*\*

Credit:3

Grade:

8

\*\*Subject 5:\*\*

Credit:3

Grade:

7

-----Student3----

Roll\_no.:101

Roll number should be unique

Roll\_no.:104

Name:

wxyz wz34

Enter valid name

Name:

wxyz wxyz

Enter valid name

Name:

wxyz wxyz wxyz

Enter marks of 5 subjects:

\*\*Subject 1:\*\*

Credit:4

Grade:

8

\*\*Subject 2:\*\*

Credit:4

Grade:

8

\*\*Subject 3:\*\*

Credit:4

Grade:

8

\*\*Subject 4:\*\*

Credit:4

Grade:

8

\*\*Subject 5:\*\*

Credit:4

Grade:

8

-----Student4----

Roll\_no.:110

Name:

efgh efgh efgh

Enter marks of 5 subjects:

\*\*Subject 1:\*\*

Credit:2

Grade:

7

\*\*Subject 2:\*\*

Credit:2

Grade:

6

\*\*Subject 3:\*\*

Credit:1

Grade:

6

\*\*Subject 4:\*\*

Credit:3

Grade:

7

\*\*Subject 5:\*\*

Credit:2

Grade:

7

-----Student5----

Roll\_no.:105

Name:

hijk hijk hijk

Enter marks of 5 subjects:

\*\*Subject 1:\*\*

Credit:5

Grade:

10

\*\*Subject 2:\*\*

Credit:5

Grade:

10

\*\*Subject 3:\*\*

Credit:5

Grade:

10

\*\*Subject 4:\*\*

Credit:5

Grade:

10

\*\*Subject 5:\*\*

Credit:5

Grade:

10

------------------------------------------------------------

1:Display

2:Sort list according to roll number

3:Sort list alphabetically

4:Sort with SGPA

5:Search student with SGPA

6:Search student according to name

7:Display toppers

8:Exit

Enter choice:1

-------------------------------------------------------------

SrNo Roll No Name SGPA

1 101 abcd abcd abcd 9

2 103 pqrs pqrs pqrs 7

3 104 wxyz wxyz wxyz 8

4 110 efgh efgh efgh 6

5 105 hijk hijk hijk 10

------------------------------------------------------------

1:Display

2:Sort list according to roll number

3:Sort list alphabetically

4:Sort with SGPA

5:Search student with SGPA

6:Search student according to name

7:Display toppers

8:Exit

Enter choice:2

-------------------------------------------------------------

Pass 1:

1 101 abcd abcd abcd 9

2 103 pqrs pqrs pqrs 7

3 104 wxyz wxyz wxyz 8

4 105 hijk hijk hijk 10

5 110 efgh efgh efgh 6

Pass 2:

1 101 abcd abcd abcd 9

2 103 pqrs pqrs pqrs 7

3 104 wxyz wxyz wxyz 8

4 105 hijk hijk hijk 10

5 110 efgh efgh efgh 6

List sorted successfully

------------------------------------------------------------

1:Display

2:Sort list according to roll number

3:Sort list alphabetically

4:Sort with SGPA

5:Search student with SGPA

6:Search student according to name

7:Display toppers

8:Exit

Enter choice:3

-------------------------------------------------------------

Pass 1:

1 101 abcd abcd abcd 9

2 103 pqrs pqrs pqrs 7

3 104 wxyz wxyz wxyz 8

4 105 hijk hijk hijk 10

5 110 efgh efgh efgh 6

Pass 2:

1 101 abcd abcd abcd 9

2 103 pqrs pqrs pqrs 7

3 104 wxyz wxyz wxyz 8

4 105 hijk hijk hijk 10

5 110 efgh efgh efgh 6

Pass 3:

1 101 abcd abcd abcd 9

2 105 hijk hijk hijk 10

3 103 pqrs pqrs pqrs 7

4 104 wxyz wxyz wxyz 8

5 110 efgh efgh efgh 6

Pass 4:

1 101 abcd abcd abcd 9

2 110 efgh efgh efgh 6

3 105 hijk hijk hijk 10

4 103 pqrs pqrs pqrs 7

5 104 wxyz wxyz wxyz 8

Sorted Successfully

------------------------------------------------------------

1:Display

2:Sort list according to roll number

3:Sort list alphabetically

4:Sort with SGPA

5:Search student with SGPA

6:Search student according to name

7:Display toppers

8:Exit

Enter choice:3

-------------------------------------------------------------

Pass 1:

1 101 abcd abcd abcd 9

2 110 efgh efgh efgh 6

3 105 hijk hijk hijk 10

4 103 pqrs pqrs pqrs 7

5 104 wxyz wxyz wxyz 8

Pass 2:

1 101 abcd abcd abcd 9

2 110 efgh efgh efgh 6

3 105 hijk hijk hijk 10

4 103 pqrs pqrs pqrs 7

5 104 wxyz wxyz wxyz 8

Pass 3:

1 101 abcd abcd abcd 9

2 110 efgh efgh efgh 6

3 105 hijk hijk hijk 10

4 103 pqrs pqrs pqrs 7

5 104 wxyz wxyz wxyz 8

Pass 4:

1 101 abcd abcd abcd 9

2 110 efgh efgh efgh 6

3 105 hijk hijk hijk 10

4 103 pqrs pqrs pqrs 7

5 104 wxyz wxyz wxyz 8

Sorted Successfully

------------------------------------------------------------

1:Display

2:Sort list according to roll number

3:Sort list alphabetically

4:Sort with SGPA

5:Search student with SGPA

6:Search student according to name

7:Display toppers

8:Exit

Enter choice:4

-------------------------------------------------------------

Pass 0:

1 103 pqrs pqrs pqrs 7

2 110 efgh efgh efgh 6

3 104 wxyz wxyz wxyz 8

4 101 abcd abcd abcd 9

5 105 hijk hijk hijk 10

Pass 1:

1 110 efgh efgh efgh 6

2 103 pqrs pqrs pqrs 7

3 104 wxyz wxyz wxyz 8

4 101 abcd abcd abcd 9

5 105 hijk hijk hijk 10

Sorted Successfully

------------------------------------------------------------

1:Display

2:Sort list according to roll number

3:Sort list alphabetically

4:Sort with SGPA

5:Search student with SGPA

6:Search student according to name

7:Display toppers

8:Exit

Enter choice:5

-------------------------------------------------------------

Enter SGPA to be search:8

3 104 wxyz wxyz wxyz 8

------------------------------------------------------------

1:Display

2:Sort list according to roll number

3:Sort list alphabetically

4:Sort with SGPA

5:Search student with SGPA

6:Search student according to name

7:Display toppers

8:Exit

Enter choice:5

-------------------------------------------------------------

Enter SGPA to be search:1

No student with SGPA 1 found

------------------------------------------------------------

1:Display

2:Sort list according to roll number

3:Sort list alphabetically

4:Sort with SGPA

5:Search student with SGPA

6:Search student according to name

7:Display toppers

8:Exit

Enter choice:6

-------------------------------------------------------------

Pass 1:

1 110 efgh efgh efgh 6

2 103 pqrs pqrs pqrs 7

3 104 wxyz wxyz wxyz 8

4 101 abcd abcd abcd 9

5 105 hijk hijk hijk 10

Pass 2:

1 110 efgh efgh efgh 6

2 103 pqrs pqrs pqrs 7

3 104 wxyz wxyz wxyz 8

4 101 abcd abcd abcd 9

5 105 hijk hijk hijk 10

Pass 3:

1 101 abcd abcd abcd 9

2 110 efgh efgh efgh 6

3 103 pqrs pqrs pqrs 7

4 104 wxyz wxyz wxyz 8

5 105 hijk hijk hijk 10

Pass 4:

1 101 abcd abcd abcd 9

2 110 efgh efgh efgh 6

3 105 hijk hijk hijk 10

4 103 pqrs pqrs pqrs 7

5 104 wxyz wxyz wxyz 8

Enter search key:pqrs pqrs pqrs

4 103 pqrs pqrs pqrs 7

------------------------------------------------------------

1:Display

2:Sort list according to roll number

3:Sort list alphabetically

4:Sort with SGPA

5:Search student with SGPA

6:Search student according to name

7:Display toppers

8:Exit

Enter choice:6

-------------------------------------------------------------

Pass 1:

1 101 abcd abcd abcd 9

2 110 efgh efgh efgh 6

3 105 hijk hijk hijk 10

4 103 pqrs pqrs pqrs 7

5 104 wxyz wxyz wxyz 8

Pass 2:

1 101 abcd abcd abcd 9

2 110 efgh efgh efgh 6

3 105 hijk hijk hijk 10

4 103 pqrs pqrs pqrs 7

5 104 wxyz wxyz wxyz 8

Pass 3:

1 101 abcd abcd abcd 9

2 110 efgh efgh efgh 6

3 105 hijk hijk hijk 10

4 103 pqrs pqrs pqrs 7

5 104 wxyz wxyz wxyz 8

Pass 4:

1 101 abcd abcd abcd 9

2 110 efgh efgh efgh 6

3 105 hijk hijk hijk 10

4 103 pqrs pqrs pqrs 7

5 104 wxyz wxyz wxyz 8

Enter search key:acde cded cdes

Student with name 'acde cded cdes' not found

------------------------------------------------------------

1:Display

2:Sort list according to roll number

3:Sort list alphabetically

4:Sort with SGPA

5:Search student with SGPA

6:Search student according to name

7:Display toppers

8:Exit

Enter choice:7

-------------------------------------------------------------

Pass 2:

1 103 pqrs pqrs pqrs 7

2 110 efgh efgh efgh 6

3 104 wxyz wxyz wxyz 8

4 101 abcd abcd abcd 9

5 105 hijk hijk hijk 10

Pass 3:

1 110 efgh efgh efgh 6

2 103 pqrs pqrs pqrs 7

3 104 wxyz wxyz wxyz 8

4 101 abcd abcd abcd 9

5 105 hijk hijk hijk 10

Enter number of toppers to be display:3

5 105 hijk hijk hijk 10

4 101 abcd abcd abcd 9

3 104 wxyz wxyz wxyz 8

------------------------------------------------------------

1:Display

2:Sort list according to roll number

3:Sort list alphabetically

4:Sort with SGPA

5:Search student with SGPA

6:Search student according to name

7:Display toppers

8:Exit

Enter choice:8

-------------------------------------------------------------

Thank You