COMPUTER ASSIGNMENT

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S2 CSE

Roll no. 23

Program 1

Output 1

```
Order of the matrix (m x n) : 3 3
Enter the elements:1 2 3 4 5 6 7 8 9
Fibonacci numbers in the matrix
 1 at [0][0]

 2 at [0][1]

 3 at [0][2]

 5 at [1][1]

 8 at [2][1]
```

Program 2

```
#include<stdio.h>

void main()

{

        int rank=1,i,j,max,total[50],a,t,n;

        struct student

        {       int rno;

                char name[20];

                int m1,m2,m3,m4;

        }s[150],temp;

        printf("How many students:");

        scanf("%d",&n);

        for(i=0;i<n;i++)
```

```
{
        printf("STUDENT %d",i+1);

        printf("\nName \t:");
        scanf(" %[^\n]",s[i].name);
        printf("\nRoll No. \t:");
        scanf(" %d",&s[i].rno);
        printf("\nSubject 1 \t:");
        scanf(" %d",&s[i].m1);
        printf("\nSubject 2 \t:");
        scanf(" %d",&s[i].m2);
        printf("\nSubject 3 \t:");
        scanf(" %d",&s[i].m3);
        printf("\nSubject 4 \t:");
        scanf(" %d",&s[i].m4);

        total[i]=s[i].m1+s[i].m2+s[i].m3+s[i].m4;}

printf("\nMax. marks : ");
        scanf("%d",&max);
a=0.4*max;

for(i=0;i<n-1;i++)
        for(j=0;j<n-i-1;j++)
        {
        if(total[j]<total[j+1])
        {
```

```
                    t=total[j];
                    total[j]=total[j+1];
                    total[j+1]=t;

                    temp=s[j];
                    s[j]=s[j+1];
                    s[j+1]=temp;}}}
```

Output 2

```
How many students:3
STUDENT 1
Name     :Jacob

Roll No.     :24

Subject 1     :98

Subject 2     :87

Subject 3     :76

Subject 4     :65
STUDENT 2
Name     :Zeref

Roll No.     :304

Subject 1     :100

Subject 2     :100

Subject 3     :100

Subject 4     :100
STUDENT 3
Name     :George

Roll No.     :123

Subject 1     :45

Subject 2     :78
```

Subject 3 :76

Subject 4 :90

Max. marks : 100
1 304 Zeref 4001
24 Jacob 3262
123 George 289

Program 3

```
#include<stdio.h>
#define MAX 100

void bubblesort(int a[][MAX], int m, int n,int k) {
        int i, j, temp;
        for (i = 0; i < n-1; i++) {
        for (j = 0; j < n-i-1; j++) {
                if (a[k][j] > a[k][j+1]) {
                temp = a[k][j];
                a[k][j] = a[k][j+1];
                a[k][j+1] = temp;
                }
        }
        }
        }

void printMatrix(int a[][MAX], int m, int n) {
        int i, j;
        for (i = 0; i < m; i++) {
        for (j = 0; j < n; j++) {
        printf("%d ", a[i][j]);
        }

        printf("\n");
        }
}
void readMatrix(int a[][MAX], int m, int n) {
        int i, j;
printf("Input your elements :");
        for (i = 0; i < m; i++)
        for (j = 0; j < n; j++)
        scanf("%d", &a[i][j]);
```

```
}
void main() {
        int a[MAX][MAX], m, n, k, i;
        printf("Enter the number of rows and columns: ");
        scanf(" %d %d", &m, &n);
        readMatrix(a, m, n);
  for(k = 0; k < m; k++) {

        bubblesort(a, m, n,k);
}
        printf("Sorted Matrix: \n");
        printMatrix(a, m, n);
}
```

Output 3

```
Enter the number of rows and columns: 3 3
Input your elements :12 3 434 4 45 323 32 4 454
Sorted Matrix:
3 12 434
4 45 323
4 32 454
```