SUM OF MATRICES

```
#include<stdio.h>
int main()
{
  int m,n,c,d,first[10][10],second[10][10],sum[10][10];
  clrscr();
  printf("Enter the number of rows and columns\n");
  scanf("%d%d",&m,&n);
  printf("Enter the elements of first matrix\n");
  for(c=0;c<m;c++)
  for(d=0;d<n;d++)
  scanf("%d",&first[c][d]);
  printf("Enter the elements of second matrix\n");
  for(c=0;c<m;c++)
  for(d=0;d<n;d++)
  scanf("%d",&second[c][d]);
  printf("Sum of entered matrices:\n");
  for(c=0;c<m;c++)
  {
    for(d=0;d<n,d++)
    {
      sum[c][d]=first[c][d]+second[c][d];
      printf("%d\t",sum[c][d]);
    }
    printf("\n");
  }
  getch();
  return 0;
}
```

MAX MARK IN A SUBJECT

```
#include<stdio.h>
int main(void)
{
   int marks[3][4], maxmark[3], r, c;
   for (r=0; r<3; r++)
   {
    printf("Enter marks of 4 students in Subject #%d!",
                (r+1));
    for(c=0; c<4; c++)
    {
      scanf("%d", &marks[r][c]);
    }
   }

   for(r=0; r<3; r++)
   {
     maxmark[r]=0;
     for (c=0; c<4; c++)
     {
       if (marks[r][c] > maxmark[r])
       {
         maxmark[r] =marks[r][c];
       }
     }
   }
   printf("--- Max - Marks ---\n");
   for(r=0; r<3; r++)
   {
    printf("Max mark in Subject #%d is %d\n", (r+1),
          maxmark[r]); }

   getch();
   return 0;
}
```

TRANSPOSE OF A MATRIX

```
#include<stdio.h>
int main()
{
   int a[10][10], transpose[10][10], r, c;
   printf("Enter number of rows and columns:");
   scanf("%d %d", &r, &c);

  printf("\nEnter matrix elements:\n");
   for(int i=0; i<r; ++i)
   for(int j=0; j<c; ++j)
   {
    printf("Enter element a%d%d:", i+1, j+1);
    scanf("%d", &a[i][j]);
   }
  printf("\nEntered matrix:\n");
  for(int i=0; i<r; ++i)
  for(int j=0; j<c; ++j)
  {
   printf("%d", a[i][j]);
   if(j==c-1)
   printf("\n");
  }
  for(int i=0; i<r; ++i)
  for(int j=0; j<c; ++j)
  {
    transpose[j][i] = a[i][j];
  }
  printf("\nTranspose of the matrix:\n");
   for(int i=0; i<c; ++i)
   for(int j=0; j<r; ++j)
   {
    printf("%d", transpose[i][j]);
    if(j==r-1)
    printf("\n");
```

```
}
getch();
return 0;
}
```