transport.c

```
#include <stdio.h>

int main()
{
	int flag=0,flag1=0;
	int s[10],d[10],sn,eop=1,dm,a[10][10];
	int i,j,sum=0,min,x[10][10],k,fa,fb;
	printf("Enter the number of supplies : ");
	scanf("%d",&sn);
	printf("Enter the number of demands : ");
	scanf("%d",&dm);
	printf("Enter the supply values : \n");
	for(i=0;i<sn;i++)
	scanf("%d",&s[i]);
	printf("Enter the demand values \n");
	for(j=0;j<sn;j++)
	scanf("%d",&d[j]);
	printf("Enter the cost matrix \n");
	for(i=0;i<sn;i++)
	{
		for(j=0;j<dm;j++)
		{
			scanf("%d",&a[i][j]);
		}
	}
	i=0;
	j=0;
	for(i=0,j=0;i<sn,j<dm;)
	{
		if(s[i]<d[j])
		{
			x[i][j]=a[i][j]*s[i];
			d[j]=d[j]-s[i];
			i++;
		}
		else if(s[i]>=d[j])
		{
			x[i][j]=a[i][j]*d[j];
			s[i]=s[i]-d[j];
			j++;
		}
	}
	printf("\n\n Given cost matrix is :");
	for(fa=0;fa<sn;fa++)
	{
		printf("\n");
		for(fb=0;fb<dm;fb++)
		{
			printf("%d ",a[fa][fb]);
		}
```

```
        }
        printf("\n\n Allocated cost matrix is : ");
        for(fa=0;fa<sn;fa++)
        {
                printf("\n");
                for(fb=0;fb<dm;fb++)
                {
                        printf("%d ",x[fa][fb]);
                        sum=sum+x[fa][fb];
                }
        }
        printf("\n\nThe transportation cost is : %d",sum);
        return(0);
}
```

Output of transport.c

```
Enter the number of supplies : 4
Enter the number of demands : 4
Enter the supply values :
220 225 275 270
Enter the demand values
270 225 275 220
Enter the cost matrix
11 13 17 14
16 18 14 10
21 21 13 10
11 11 11 11


 Given cost matrix is :
11 13 17 14
16 18 14 10
21 21 13 10
11 11 11 11

 Allocated cost matrix is :
2200 650 0 0
0 3150 700 0
0 0 2925 500
0 0 0 2200

The transportation cost is : 12325
```