```c
//How take input and print 2D array//
#include<stdio.h>
int main()
{
    int a[10][10],row,col,size;
    scanf("%d",&size);
    for(row=0;row<size;row++)
    {
        for(col=0;col<size;col++)
        {
            scanf("%d",&a[row][col]);
        }
    }
    for(row=0;row<size;row++)
    {
        for(col=0;col<size;col++)
        {
            printf("%d",a[row][col]);
        }
        printf("\n");
    }
    return 0;
}

Question----1

#include<stdio.h>
int main()
{
    int a[10][10],b[10][10],row,col,size;
    scanf("%d",&size);
    for(row=0;row<size;row++)
    {
        for(col=0;col<size;col++)
        {
            scanf("%d",&a[row][col]);
        }
    }
    for(row=0;row<size;row++)
    {
        for(col=0;col<size;col++)
        {
            b[row][col]=a[row][col];
        }
        printf("\n");
    }
    for(row=0;row<size;row++)
```

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48:     {
49:         for(col=0;col<size;col++)
50:         {
51:             printf("%d",b[row][col]);
52:         }
53:         printf("\n");
54:     }
55:     return 0;
56: }
57:
58: Question----2
59:
60: #include<stdio.h>
61: int main()
62: {
63:     int a[10][10],b[10][10],c[10][10],row,col,Rsize,Csize;
64:     scanf("%d",&Rsize);
65:     scanf("%d",&Csize);
66:     for(row=0;row<Rsize;row++)
67:     {
68:         for(col=0;col<Csize;col++)
69:         {
70:             printf("enter the 1st array:----");
71:             scanf("%d",&a[row][col]);
72:         }
73:     }
74:     for(row=0;row<Rsize;row++)
75:     {
76:         for(col=0;col<Csize;col++)
77:         {
78:             printf("enter the 2nd array:---");
79:             scanf("%d",&b[row][col]);
80:         }
81:     }
82:     for(row=0;row<Rsize;row++)
83:     {
84:         for(col=0;col<Csize;col++)
85:         {
86:             c[row][col]=a[row][col]+b[row][col];
87:             printf("%d",c[row][col]);
88:         }
89:     }
90:     return 0;
91: }
92:
93: Question---4
94:
```

```c
#include<stdio.h>
int main()
{
    int a[10][10],row,col,Rsize,Csize,sum=0;
    scanf("%d",&Rsize);
    scanf("%d",&Csize);
    for(row=0;row<Rsize;row++)
    {
        for(col=0;col<Csize;col++)
        {
            scanf("%d",&a[row][col]);
        }
    }
    for(row=0;row<Rsize;row++)
    {
        sum=0;
        for(col=0;col<Csize;col++)
        {
            sum=sum+a[row][col];
        }
        printf("\n");
        printf("The Sum of Elements of a Rows in a Matrix =  %d \n", s
    }

    return 0;
}

Question---5

#include<stdio.h>
int main()
{
    int a[10][10],row,col,Rsize,Csize,sum=0;
    scanf("%d",&Rsize);
    scanf("%d",&Csize);
    for(row=0;row<Rsize;row++)
    {
        for(col=0;col<Csize;col++)
        {
            scanf("%d",&a[row][col]);
        }
    }
    for(row=0;row<Csize;row++)
    {
        sum=0;
        for(col=0;col<Rsize;col++)
        {
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142:             sum=sum+a[col][row];
143:         }
144:         printf("\n");
145:         printf("The Sum of Elements of a Columns in a Matrix =  %d \n"
146:     }
147:
148:     return 0;
149: }
150:
151: Question---6
152:
153: #include<stdio.h>
154: int main()
155: {
156:     int a[10][10],row,col,Rsize,Csize,sum=0,c=0;
157:     scanf("%d",&Rsize);
158:     scanf("%d",&Csize);
159:     for(row=0;row<Rsize;row++)
160:     {
161:         for(col=0;col<Csize;col++)
162:         {
163:             scanf("%d",&a[row][col]);
164:         }
165:     }
166:     for(row=0;row<Rsize;row++)
167:     {
168:             sum=sum+a[row][row];
169:             c = c + a[row][Rsize - row - 1];
170:     }
171:     printf("\n");
172:     printf("The Sum of Elements of a 1st matrix in a Matrix =  %d \n",
173:     printf("The Sum of Elements of a 2nd matrix in a Matrix =  %d \n",
174:     return 0;
175: }
176:
177: Question---7
178:
179: #include<stdio.h>
180: int main()
181: {
182:     int r, c, sum = 0,i,j,arr[100][100];
183:     printf("Enter the order of the matrix : ");
184:     scanf("%d %d",&r,&c);
185:     printf("Input the matrix elements:---");
186:     for(i = 0; i < r; i++)
187:     {
188:         for(j = 0; j < c; j++)
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189:             scanf("%d",&arr[i][j]);
190:     }
191:     for(i = 0; i < r; i++)
192:     {
193:         for(j = 0; j < c; j++)
194:             {
195:                 if((i==0) || (j==0) || (i==r-1) || (j==c-1))
196:                     {
197:                         sum = sum + arr[i][j];
198:                     }
199:                 else
200:                     printf(" ");
201:             }
202:         printf("\n");
203:     }
204:     printf("Sum of boundary is %d", sum);
205: }
206:
207: //Question---8
208:
209: #include<stdio.h>
210: int main()
211: {
212:     int r, c, sum = 0,i,j,arr[100][100];
213:     printf("Enter the order of the matrix : ");
214:     scanf("%d %d",&r,&c);
215:     printf("Input the matrix elements:---");
216:     for(i = 0; i < r; i++)
217:     {
218:         for(j = 0; j < c; j++)
219:             scanf("%d",&arr[i][j]);
220:     }
221:     printf("After taking values:---");
222:     for(i = 0; i < r; i++)
223:     {
224:         for(j = 0; j < c; j++)
225:             printf("%d ",arr[i][j]);
226:     }
227:     printf(",, After making spiral way print:----");
228:     for(i = 0; i < r; i++)
229:     {
230:
231:             if(i%2==0)
232:             {
233:                 for (j = 0; j <c; j++)
234:                     printf("%d ",arr[i][j]);
235:             }
```

```
            else
            {
                for(j=c-1;j>=0;j--)
                {
                    printf("%d ",arr[i][j]);
                }
            }
    }
}

//Question---9

#include<stdio.h>
int main(){
    int a[10][10],row,col,i,j;
    scanf("%d %d",&i,&j);
    for(row=0;row<i;row++){
        for(col=0;col<j;col++){
            scanf("%d",&a[row][col]);
        }
    }
    for(row=0;row<i;row++){
        for(col=0;col<j;col++){
            if(col%2==0){
                printf("%d ",a[row][col]);
            }
            else{
                printf("%d ",a[i-1-row][col]);
            }
        }
        printf("\n");
        }

return 0;
}

//Question---2

#include <stdio.h>

int main()
{
  int m, n, p, q, c, d, k, sum = 0;
  int first[10][10], second[10][10], arr[10][10];

  printf("Enter number of rows and columns of first matrix\n");
  scanf("%d%d", &m, &n);
```

```
283:   printf("Enter elements of first matrix\n");
284:
285:   for (c = 0; c < m; c++)
286:     for (d = 0; d < n; d++)
287:       scanf("%d", &first[c][d]);
288:
289:   printf("Enter number of rows and columns of second matrix\n");
290:   scanf("%d%d", &p, &q);
291:
292:   if (n != p)
293:     printf("The multiplication isn't possible.\n");
294:   else
295:   {
296:     printf("Enter elements of second matrix\n");
297:
298:     for (c = 0; c < p; c++)
299:       for (d = 0; d < q; d++)
300:         scanf("%d", &second[c][d]);
301:
302:     for (c = 0; c < m; c++) {
303:       for (d = 0; d < q; d++) {
304:         for (k = 0; k < p; k++) {
305:           sum = sum + first[c][k]*second[k][d];
306:         }
307:
308:         arr[c][d] = sum;
309:         sum = 0;
310:       }
311:     }
312:     printf("Product of the matrices:\n");
313:
314:     for (c = 0; c < m; c++) {
315:       for (d = 0; d < q; d++)
316:         printf("%d\t", arr[c][d]);
317:
318:       printf("\n");
319:     }
320:   }
321:   return 0;
322: }
```