Assignment:21

Q.1 Accept number of rows and columns and print pattern.

Ans.

```c
#include<stdio.h>

void Display(int iRows,int iCols)
{
    int iR=0,iC=0,iNo=1;

    for(iR=1;iR<=iRows;iR++)
    {
        for(iC=1;iC<=iCols;iC++)
        {
            if(iNo>=10)
            {
                iNo=1;
            }
            printf("%d\t",iNo);

            iNo++;
        }
        printf("\n");
    }
}

int main()
{
    int iRows=0,iCols=0;

    printf("Enter number of rows and columns:\n");
    scanf("%d %d",&iRows,&iCols);

    Display(iRows,iCols);

    return 0;
}
```

OUTPUT:

```
Command Prompt

C:\Users\adity\OneDrive\Desktop\LB assignment\Assignment 21>q1exe
Enter number of rows and columns:
4
4
1       2       3       4
5       6       7       8
9       1       2       3
4       5       6       7

C:\Users\adity\OneDrive\Desktop\LB assignment\Assignment 21>
```

Q.2 Accept number of rows and columns and display pattern.

Ans.

```c
#include<stdio.h>

void Display(int iRows,int iCols)
{
    int iR=0,iC=0,iNoE=11,iNoO=10;

    for(iR=1;iR<=iRows;iR++)
    {
        if(iR%2!=0)
        {
            for(iC=1;iC<=iCols;iC++)
            {
                if(iNoE>10)
                {
                    iNoE=2;
                }
                printf("%d\t",iNoE);
                iNoE+=2;
            }
            printf("\n");
        }

        else if (iR%2==0)
        {
            for(iC=0;iC<iCols;iC++)
            {
```

```c
                if(iNoO>9)
                {
                    iNoO=1;
                }
                printf("%d\t",iNoO);
                iNoO+=2;
            }
            printf("\n");
        }
    }
}

int main()
{
    int iRows=0,iCols=0;

    printf("Enter number of rows and columns:\n");
    scanf("%d %d",&iRows,&iCols);

    Display(iRows,iCols);

    return 0;
}
```
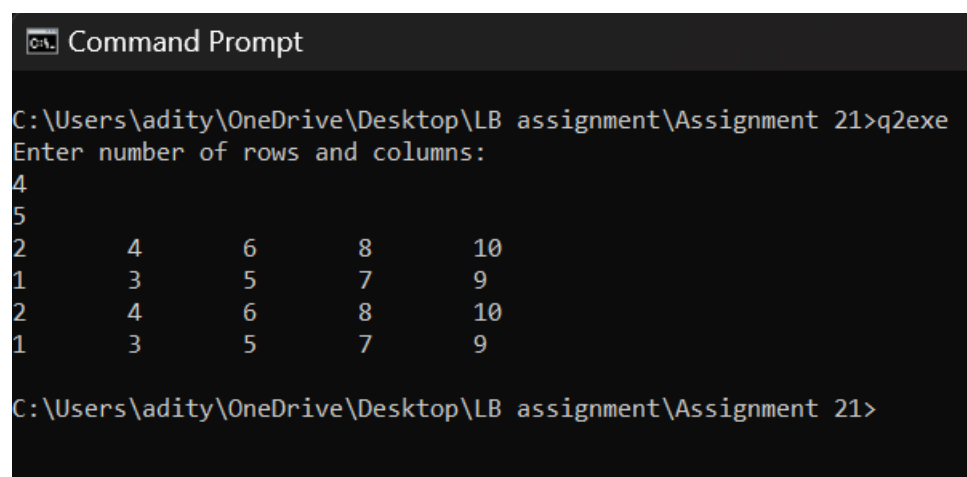
OUTPUT:

```
Command Prompt

C:\Users\adity\OneDrive\Desktop\LB assignment\Assignment 21>q2exe
Enter number of rows and columns:
4
5
2       4       6       8       10
1       3       5       7       9
2       4       6       8       10
1       3       5       7       9

C:\Users\adity\OneDrive\Desktop\LB assignment\Assignment 21>
```

Q.3 Accept number from user and display below pattern.

Ans.

```c
#include<stdio.h>

void Display(int iRows,int iCols)
{
    int iR=0,iC=0;

    for(iR=1;iR<=iRows;iR++)
    {
        int iNo=1;
        char ch='a';
        if(iR%2!=0)
        {
            for(iC=1;iC<=iCols;iC++)
            {
                printf("%c\t",ch);
                ch++;
            }
            printf("\n");
        }
        else if(iR%2==0)
        {
            for(iC=1;iC<=iCols;iC++)
            {
                printf("%d\t",iNo);
                iNo++;
            }
            printf("\n");
        }
    }

}

int main()
{
    int iRow=0,iCol=0;

    printf("Enter rows and columns to print pattern:\n");
    scanf("%d %d",&iRow,&iCol);

    Display(iRow,iCol);

    return 0;
```

```
}
```

OUTPUT:

Q.4 Accept number of rows and col from user print pattern.

Ans.

```c
#include<stdio.h>

void Display(int iRows,int iCols)
{
    int iR=0,iC=0;

    for(iR=1;iR<=iRows;iR++)
    {
        int iNo=1;
        if(iR%2!=0)
        {
            for(iC=1;iC<=iCols;iC++)
            {
                printf("%d\t",iNo);
                iNo++;
            }
            printf("\n");
        }
        else if(iR%2==0)
        {
```

```c
            iNo=-iNo;
            for(iC=1;iC<=iCols;iC++)
            {
                printf("%d\t",iNo);
                iNo--;
            }
            printf("\n");
        }
    }

}

int main()
{
    int iRow=0,iCol=0;

    printf("Enter rows and columns to print pattern:\n");
    scanf("%d %d",&iRow,&iCol);

    Display(iRow,iCol);

    return 0;

}
```
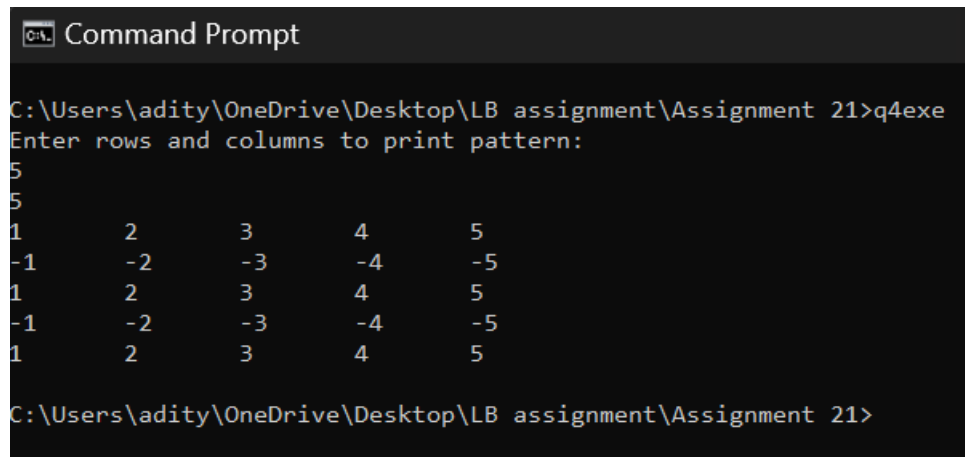
OUTPUT:

Q.5 Accept number of rows and columns and print patterns.

Ans.

```c
#include<stdio.h>

void Display(int iRows,int iCols)
{
    int iR=0,iC=0,iNo=0;

    for(iR=1;iR<=iRows;iR++)
    {
        iNo++;
        for(iC=1;iC<=iCols;iC++)
        {
            printf("%d\t",iNo);

            iNo++;
        }
        iNo=iNo-iCols;
        printf("\n");
    }
}

int main()
{
    int iRows=0,iCols=0;

    printf("Enter number of rows and columns:\n");
    scanf("%d %d",&iRows,&iCols);

    Display(iRows,iCols);

    return 0;
}
```
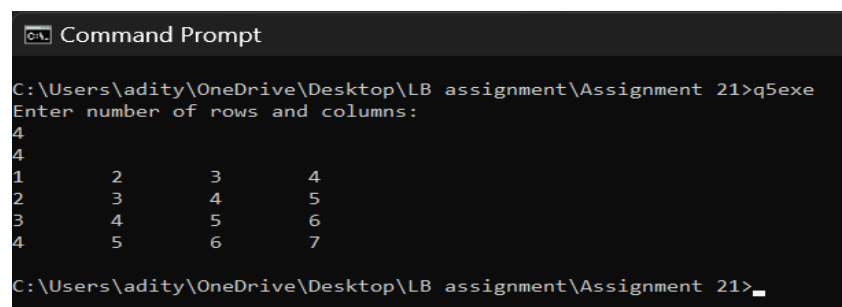
OUTPUT: