

Assignment 3

Q.1 Accept a number from users and print that number of seven number.

Ans.

```
#include<stdio.h>

void Display(int iVal)
{
    int iCnt=0;
    int iAns=0;

    for(iCnt=1;iCnt<=iVal;iCnt++)
    {
        iAns+=2;

        printf("%d\t",iAns);
    }
}

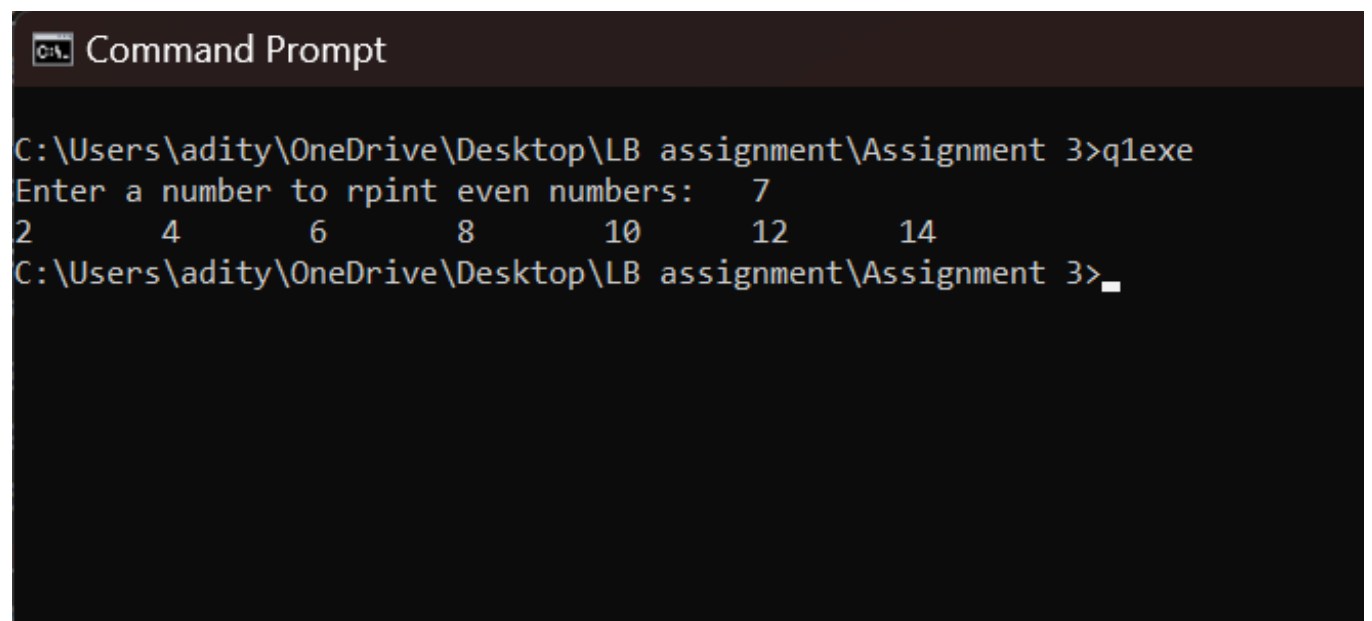
int main()
{
    int iNo=0;

    printf("Enter a number to print even numbers:\t");
    scanf("%d",&iNo);

    Display(iNo);

    return 0;
}
```

OUTPUT:



```
C:\Users\adity\OneDrive\Desktop\LB assignment\Assignment 3>q1.exe
Enter a number to print even numbers: 7
2      4      6      8      10     12     14
C:\Users\adity\OneDrive\Desktop\LB assignment\Assignment 3>
```

Q.2 Accept a number from user and print even factors of that number using for loop.

Ans.

```
#include<stdio.h>

void Display(int iVal)
{
    int iCnt=0;
    printf("Even Factors are:\n");
    for(iCnt=2;iCnt<=(iVal/2);iCnt+=2)
    {
        if(iVal%iCnt==0)
        {
            printf("%d\t",iCnt);
        }
    }
}

int main()
{
    int iNo=0;

    printf("Enter a number to print it's even factors:\t");
    scanf("%d",&iNo);

    Display(iNo);

    return 0;
}
```

OUTPUT:

```
Command Prompt

C:\Users\adity\OneDrive\Desktop\LB assignment\Assignment 3>gcc q2_.c -o q2exe

C:\Users\adity\OneDrive\Desktop\LB assignment\Assignment 3>q2exe
Enter a number to print it's even factors:      24
Even Factors are:
2      4      6      8      12
C:\Users\adity\OneDrive\Desktop\LB assignment\Assignment 3>
```

Q.3 Accept a number from user and print even factors of that number using While loop.

Ans.

```
#include<stdio.h>

void Display(int iVal)
{
    int iCnt=0;

    printf("Even Factors are:\n");

    iCnt=2;
    while (iCnt<=(iVal/2))
    {
        if(iVal%iCnt==0)
        {
            printf("%d\t",iCnt);
        }
        iCnt+=2;
    }
}

int main()
```

```

{
    int iNo=0;

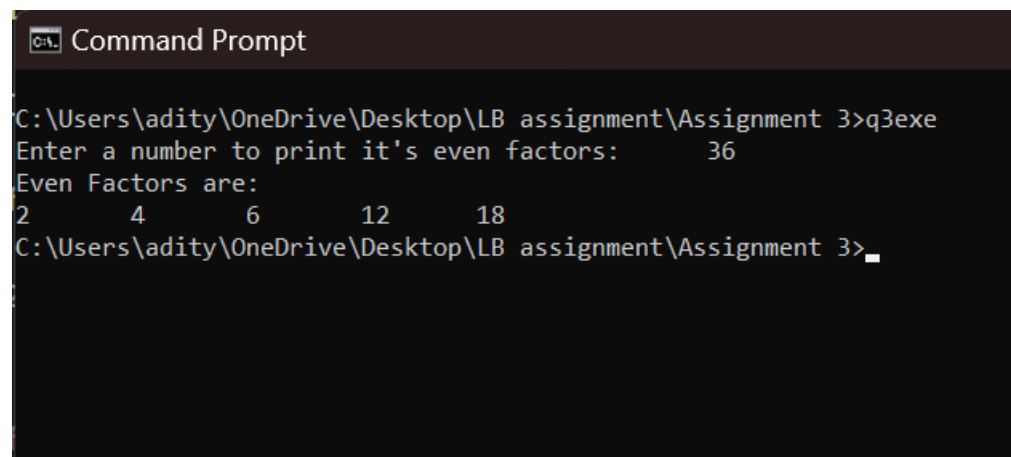
    printf("Enter a number to print it's even factors:\t");
    scanf("%d",&iNo);

    Display(iNo);

    return 0;
}

```

OUTPUT:



```

C:\Users\adity\OneDrive\Desktop\LB assignment\Assignment 3>q3.exe
Enter a number to print it's even factors:      36
Even Factors are:
2      4      6      12      18
C:\Users\adity\OneDrive\Desktop\LB assignment\Assignment 3>_

```

Q.4 Accept one character from user and covert case of that character.

Ans.

```

#include<stdio.h>
#include<ctype.h>

void Display(char cVar)
{
    if(cVar==tolower(cVar))
    {
        printf("The upper case is represented as:\t%c",toupper(cVar));
    }
}

```

```

    else if(cVar==toupper(cVar))
    {
        printf("The lower case is represented as :\t%c",tolower(cVar));
    }
}

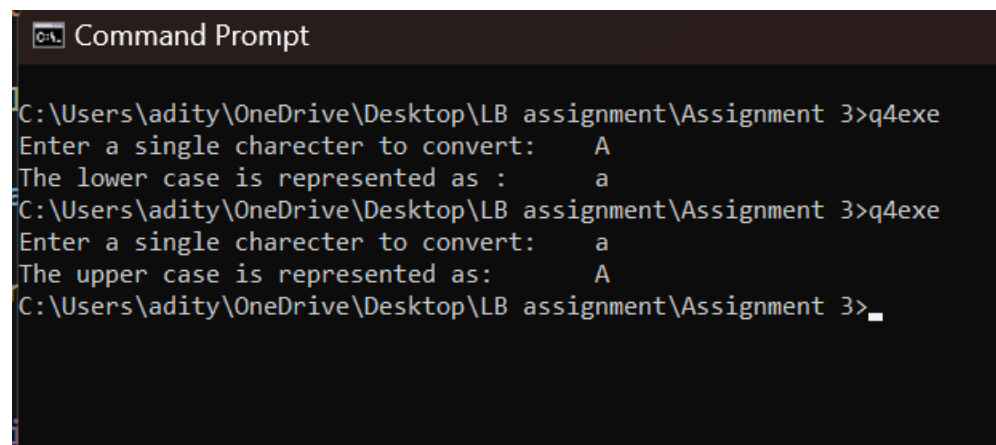
int main()
{
    char cVar='0';

    printf("Enter a single charecter to convert:\t");
    scanf("%c",&cVar);

    Display(cVar);
    return 0;
}

```

OUTPUT:



```

C:\Users\adity\OneDrive\Desktop\LB assignment\Assignment 3>q4exe
Enter a single charecter to convert:    A
The lower case is represented as :      a
C:\Users\adity\OneDrive\Desktop\LB assignment\Assignment 3>q4exe
Enter a single charecter to convert:    a
The upper case is represented as:      A
C:\Users\adity\OneDrive\Desktop\LB assignment\Assignment 3>_

```

Q.5 Accept one character from user and check whether the character is vowel or not

Ans.

```
#include <stdio.h>
#include<stdbool.h>

char Vowel(char c)
{
    int lowercase_vowel, uppercase_vowel;
    // evaluates to 1 if variable c is a lowercase vowel
    lowercase_vowel = (c == 'a' || c == 'e' || c == 'i' || c == 'o' || c == 'u');

    // evaluates to 1 if variable c is a uppercase vowel
    uppercase_vowel = (c == 'A' || c == 'E' || c == 'I' || c == 'O' || c == 'U');

    // evaluates to 1 (true) if c is a vowel
    if (lowercase_vowel || uppercase_vowel)
    {
        return true;
    }
}

int main() {
    char cVar=0;
    printf("Enter an alphabet: ");
    scanf("%c", &cVar);

    int iRet=Vowel(cVar);
    if(iRet==true)
    {
        printf("%c is a vowel.", cVar);
    }

    else{
        printf("%c is a consonant.", cVar);
    }

    return 0;
}
```

OUTPUT:

```
Command Prompt
C:\Users\adity\OneDrive\Desktop\LB assignment\Assignment 3>q5exe
Enter an alphabet: a
a is a vowel.
C:\Users\adity\OneDrive\Desktop\LB assignment\Assignment 3>q5exe
Enter an alphabet: E
E is a vowel.
C:\Users\adity\OneDrive\Desktop\LB assignment\Assignment 3>q5exe
Enter an alphabet: t
t is a consonant.
C:\Users\adity\OneDrive\Desktop\LB assignment\Assignment 3>
```