Assignment:23

Q.1 Accept a character from user and check whether its alphabet or not.

Ans.

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

bool CheckAlphabet(char cVal)
{
    if((cVal>='a')&&(cVal<='z')||(cVal>='A')&&(cVal<='Z'))
    {
        return true;
    }
    else{
        return false;
    }
}

int main()
{
    char cVal='\0';

    printf("Enter a charecter to check it is alphabet or not:\n");
    scanf("%c",&cVal);

    bool bRet=CheckAlphabet(cVal);
    if(bRet==true)
    {
        printf("%c is an alphabet..",cVal);
    }
    else{
        printf("%c is not an alphabet",cVal);
    }

    return 0;
}
```

OUTPUT:

```
Command Prompt          ×    +   ∨

C:\Users\adity\OneDrive\Desktop\LB assignment\Assignment 23>q1exe
Enter a charecter to check it is alphabet or not:
F
F is an alphabet..
C:\Users\adity\OneDrive\Desktop\LB assignment\Assignment 23>q1exe
Enter a charecter to check it is alphabet or not:
&
& is not an alphabet
C:\Users\adity\OneDrive\Desktop\LB assignment\Assignment 23>|
```

Q.2 Accept a character from user and check whether its capital.

Ans.

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

bool CheckAlphabet(char cVal)
{
    if((cVal>='A')&&(cVal<='Z'))
    {
        return true;
    }
    else{
        return false;
    }
}

int main()
{
    char cVal='\0';

    printf("Enter a charecter to check it is alphabet or not:\n");
    scanf("%c",&cVal);

    bool bRet=CheckAlphabet(cVal);
    if(bRet==true)
```
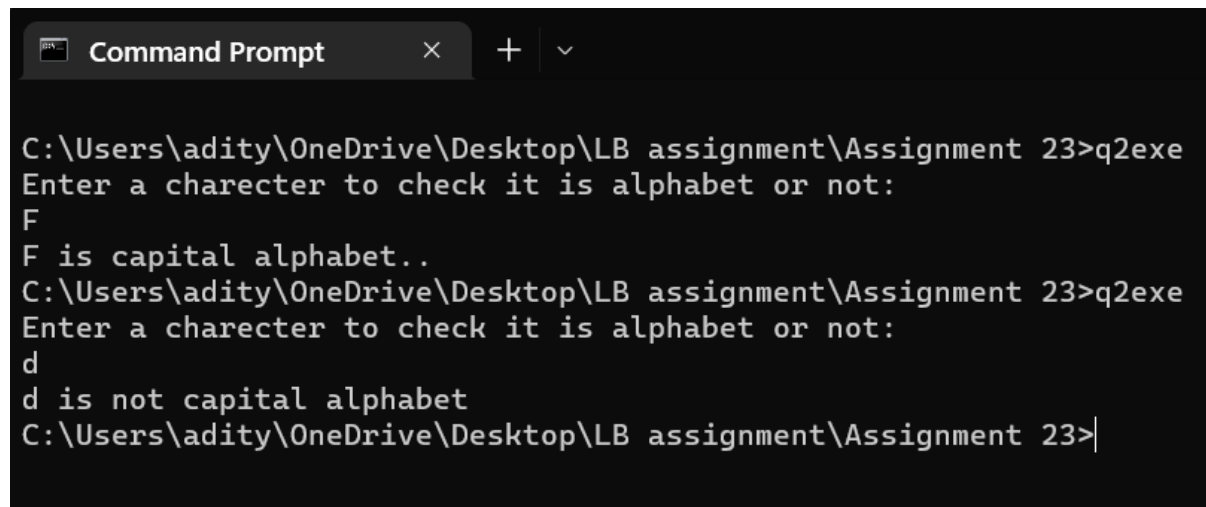
```
    {
        printf("%c is capital alphabet..",cVal);
    }
    else{
        printf("%c is not capital alphabet",cVal);
    }

    return 0;
}
```

OUTPUT:


```
C:\Users\adity\OneDrive\Desktop\LB assignment\Assignment 23>q2exe
Enter a charecter to check it is alphabet or not:
F
F is capital alphabet..
C:\Users\adity\OneDrive\Desktop\LB assignment\Assignment 23>q2exe
Enter a charecter to check it is alphabet or not:
d
d is not capital alphabet
C:\Users\adity\OneDrive\Desktop\LB assignment\Assignment 23>|
```

Q.3 Accept a character from user and check whether it is digit.

Ans.

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

bool CheckAlphabet(char cVal)
{
    if((cVal>='0')&&(cVal<='9'))
    {
        return true;
    }
    else{
        return false;
    }
}
```

```
int main()
{
    char cVal='\0';

    printf("Enter a charecter to check it is alphabet or not:\n");
    scanf("%c",&cVal);

    bool bRet=CheckAlphabet(cVal);
    if(bRet==true)
    {
        printf("%c is a digit..",cVal);
    }
    else{
        printf("%c is not a digit",cVal);
    }

    return 0;
}
```
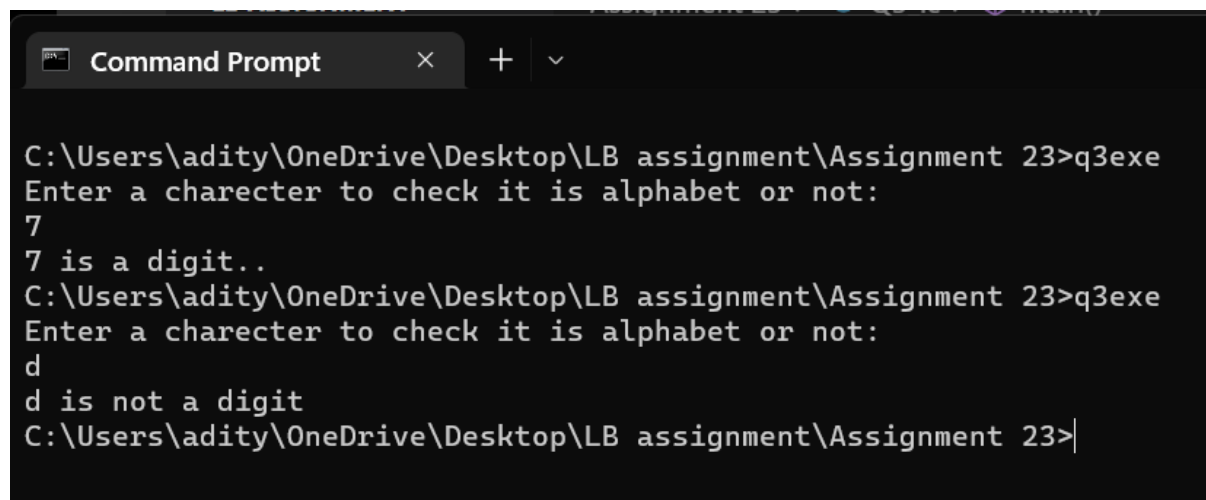
OUTPUT:

Q.4 Accept a character from user and check whether it is small case.

Ans.

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

bool CheckAlphabet(char cVal)
```

```c
{
    if((cVal>='a')&&(cVal<='z'))
    {
        return true;
    }
    else{
        return false;
    }
}

int main()
{
    char cVal='\0';

    printf("Enter a charecter to check it is alphabet or not:\n");
    scanf("%c",&cVal);

    bool bRet=CheckAlphabet(cVal);
    if(bRet==true)
    {
        printf("%c is a small case charecter..",cVal);
    }
    else{
        printf("%c is not a small case charecter",cVal);
    }

    return 0;
}
```
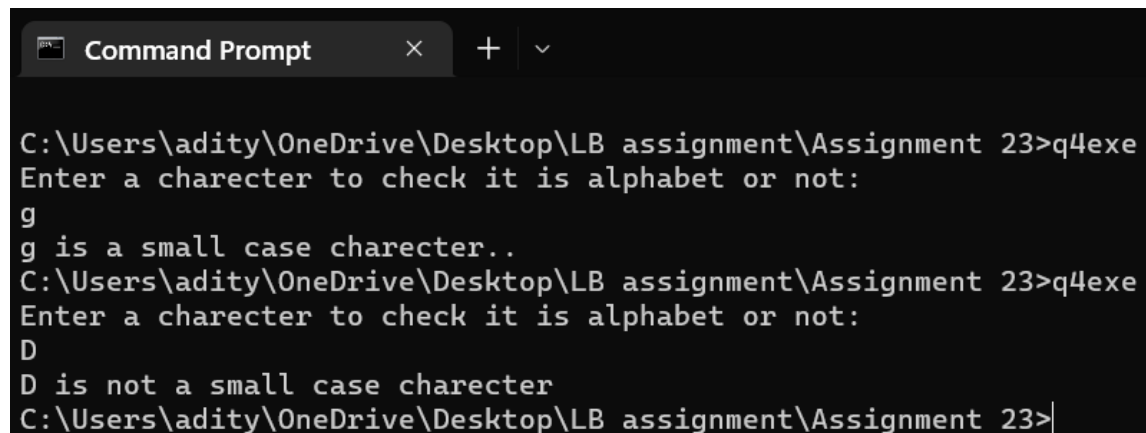
OUTPUT:

```
Command Prompt                    ×    +    ⌄

C:\Users\adity\OneDrive\Desktop\LB assignment\Assignment 23>q4exe
Enter a charecter to check it is alphabet or not:
g
g is a small case charecter..
C:\Users\adity\OneDrive\Desktop\LB assignment\Assignment 23>q4exe
Enter a charecter to check it is alphabet or not:
D
D is not a small case charecter
C:\Users\adity\OneDrive\Desktop\LB assignment\Assignment 23>
```

Q.5 Accept division of a student and return the exam time for that division.

Ans.

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

void Display(char cVar)
{
    if(cVar==tolower(cVar))
    {
        cVar=toupper(cVar);
    }

    switch (cVar)
    {
        case 'a':
        printf("Your exam is at 7 A.M.");
        break;

        case 'B':
        printf("Your exam is at 8:30 A.M.");
        break;

        case 'C':
        printf("Your exam is at 9:20 A.M.");
        break;

        case 'D':
        printf("Your exam is at 10:30 A.M.");
        break;

        default:
        printf("Enter a valid division...");
        break;
    }
}

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

    printf("Enter your class division:\n");
    scanf("%c",&cVar);
```
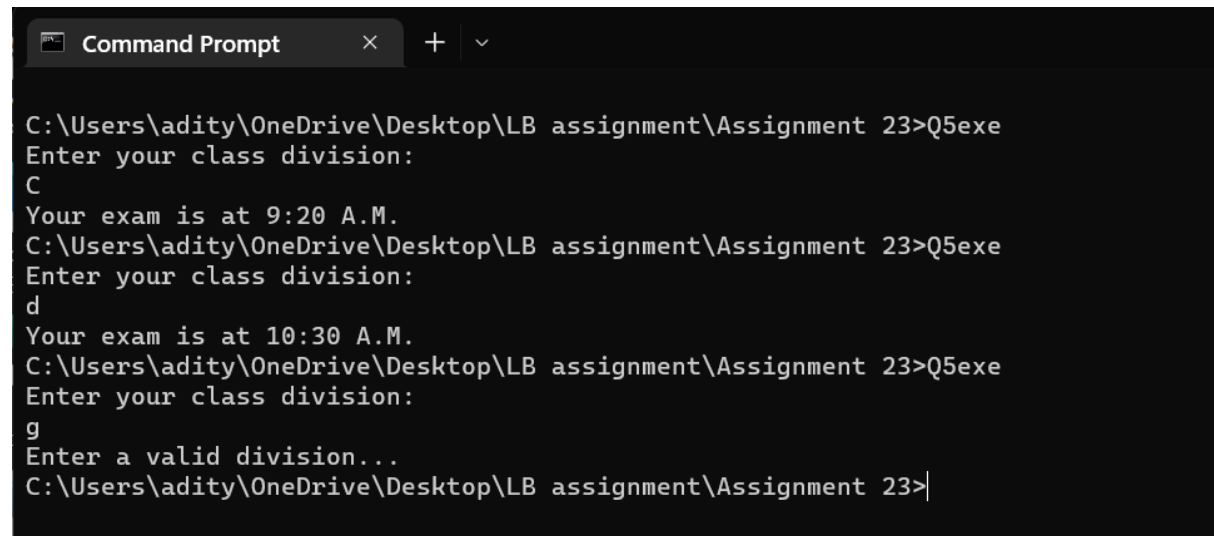
```
    Display(cVar);
    return 0;
}
```

OUTPUT:

```
C:\Users\adity\OneDrive\Desktop\LB assignment\Assignment 23>Q5exe
Enter your class division:
C
Your exam is at 9:20 A.M.
C:\Users\adity\OneDrive\Desktop\LB assignment\Assignment 23>Q5exe
Enter your class division:
d
Your exam is at 10:30 A.M.
C:\Users\adity\OneDrive\Desktop\LB assignment\Assignment 23>Q5exe
Enter your class division:
g
Enter a valid division...
C:\Users\adity\OneDrive\Desktop\LB assignment\Assignment 23>
```