Logic Building Assignment : 28

Create separate visual Studio project for each problem statement separately.

1.Write a program which accept string from user and accept one character. Check whether that character is present in string or not.

Input : **"Marvellous Multi OS"**
e

Output : **TRUE**

Input : **"Marvellous Multi OS"**
W

Output : **FALSE**

```
#define TRUE 1
#define FALSE 0

typedef int BOOL

BOOL ChkChar(char *str, char ch)
{
        // Logic
}

int main()
{
    char arr[20];
    char cValue;
    BOOL bRet = FALSE;
```

```
        printf("Enter string");
        scanf("%[^'\n']s",arr);

        printf("Enter the character");
        scanf("%c",&cValue);

        bRet = ChkChar(arr, cValue);

        if(bRet == TRUE)
        {
                printf("Character found");
        }
        else
        {
                printf("Character not found");
        }

        return 0;
}
```

2.Write a program which accept string from user and accept one character. Return frequency of that character.

Input : **"Marvellous Multi OS"**
M

Output : **2**

Input : **"Marvellous Multi OS"**
W

Output : **0**

```
int CountChar(char *str, char ch)
{
        // Logic
}

int main()
{
    char arr[20];
    char cValue;
    int iRet = 0;

    printf("Enter string");
    scanf("%[^'\n']s",arr);

    printf("Enter the character");
    scanf("%c",&cValue);

    iRet = CountChar(arr, cValue);

    printf("Character frequency is %d",iRet);

    return 0;
}
```

3.Write a program which accept string from user and accept one character. Return index of first occurrence of that character.

Input : **"Marvellous Multi OS"**
M

Output : **0**

Input : **“Marvellous Multi OS”**
W

Output : **-1**

Input : **“Marvellous Multi OS”**
e

Output : **4**

```
int FirstChar(char *str, char ch)
{
        // Logic
}

int main()
{
    char arr[20];
    char cValue;
    int iRet = 0;

    printf(“Enter string”);
    scanf(“%[^’\n’]s”,arr);

    printf(“Enter the character”);
    scanf(“%c”,&cValue);

    iRet = FirstChar(arr, cValue);

    printf(“Character location is %d”,iRet);

    return 0;
```

```
}
```

4.Write a program which accept string from user and accept one character. Return index of last occurrence of that character.

Input : **"Marvellous Multi OS"**
M

Output : **11**

Input : **"Marvellous Multi OS"**
W

Output : **-1**

Input : **"Marvellous Multi OS"**
e

Output : **4**

```
int LastChar(char *str, char ch)
{
        // Logic
}

int main()
{
    char arr[20];
    char cValue;
    int iRet = 0;

    printf("Enter string");
```

```
    scanf("%[^'\n']s",arr);

    printf("Enter the character");
    scanf("%c",&cValue);

    iRet = LastChar(arr, cValue);

    printf("Character location is %d",iRet);

    return 0;
}
```

5. Write a program which accept string from user reverse that string in place.

Input : **"abcd"**

Output : **"dcba"**

Input : **"abba"**

Output : **"abba"**

```
void StrRevX(char *str)
{
        // Logic
}

int main()
{
    char arr[20];
```

```
    printf("Enter string");
    scanf("%[^'\n']s",arr);

    StrRevX(arr);

    printf("Modified string is %s",arr);

    return 0;
}
```