

Logic Building Assignment : 27

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;  
}
```

