Assignment 11

1.//Write a program to scan string from user then scan a single character and search it
//in a accepted string.

```
int main()
{
    char str[15];
    char a;
    printf("Enter a string:\n");
    scanf("%s", str);
    printf("Enter a character to search in string:\n");
//  getchar();
    scanf(" %c", &a);

    int i=0, flag=0;
    while(str[i]!='\0'){
        if(str[i]==a){
            flag = 1;
            printf("The character found at index %d", i);
            break;
        }
        i++;
    }
    if(flag==0){
        printf("Character not found in the string");
    }
}
```

2. //WAP Replace all Occurrences of ‘a’ with $ in a String

```
int main()
{
    char str[15];
    printf("Enter a string:");
    scanf("%s",str);

    int i=0;
    while(str[i]!='\0'){
        if(str[i]=='a'){
            str[i]='$';
        }
        i++;
    }
    printf("The replaced string is: %s",str);
}
```

3. //WAP to Remove the nth Index Character from a Non-Empty String

```
int main()
```

```
{
    char str[15];
    printf("Enter a string:");
    scanf("%s",str);
    char str1[15];
    int n;
    printf("Enter a index number to remove:");
    scanf("%d",&n);
    int k=0;
    while(str[k]!='\0'){
            k++;
    }
    int len = k;
    while (n >= len || n < 0) {
      printf("Enter a valid index (0 to %d): ", len - 1);
      scanf("%d", &n);
   }

    int i,j=0;
    for(i=0;str[i]!='\0';i++){
            if(i==n){
                    continue;
            }
            str1[j]=str[i];
            j++;
    }
    str1[j]='\0';
    printf("%s",str1);
}
```

4. //WAP to Form a New String where the First Character and the Last Character have //been Exchanged

```
#include<stdio.h>
#include<string.h>
int main()
{
    char str1[15];
    printf("Enter a string:");
    scanf("%s",str1);

    int i=0;
    while(str1[i]!='\0')
    {
            i++;
    }
```

```
    int temp;

            temp = str1[0];
            str1[0] = str1[i-1];
            str1[i-1] = temp;

    printf("The changed string is %s",str1);
 }
```

5. //WAP to Count the Number of Vowels in a String

```
#include<stdio.h>
#include<string.h>
int main()
{
    char str[15];
    printf("Enter a string:");
    fgets(str,sizeof(str),stdin);

    int j =0;
    while(str[j]!='\0'){
            j++;
    }
    int len = j;
    int i,count=0;
    for(i=0; i<len; i++){

    if(str[i]=='a'||str[i]=='e'||str[i]=='i'||str[i]=='o'||str[i]=='u'||str[i]=='A'||str[i]=='E'||str[i]=='
I'||str[i]=='O'||str[i]=='U'){
                    count++;
            }
    }
    printf("Number of vowels in string are:%d", count);
}
```

6. //WAP to Take in a String and Replace Every Blank Space with special symbol.

```
#include<stdio.h>
#include<string.h>
int main()
{
    char str[15];
    printf("Enter a string:");
    fgets(str, sizeof(str), stdin);

    int i=0;
    while(str[i]!='\0'){
            if(str[i]==' '){
```

```
                str[i]='$';
            }
            i++;
    }
    printf("The replaced string is:%s",str);

}
```

7. //WAP to Remove the Characters of Odd Index Values in a String

```
#include<stdio.h>
#include<string.h>
int main()
{
    char str[15];
    printf("Enter a string:");
    fgets(str, sizeof(str),stdin);
    char str1[15];

    int i=0,j=0;
    while(str[i]!='\0'){

            if(i%2==0){
                str1[j]=str[i];
                j++;
       }
            i++;
            }
            str1[j]='\0';
    printf("The new string is:%s",str1);
}
```

8. //WAP to Calculate the Number of Words Present in a String

```
#include<stdio.h>
#include<string.h>
int main()
{
    char str[15];
    printf("Enter a string:");
    fgets(str, sizeof(str), stdin);

    int len=strlen(str);

    int i,count=0;
    for(i=0;str[i]!='\0';i++){
            if((str[i]>='a'||str[i]>='A')&&(str[i]<='z'||str[i]<='Z')){
                count++;
```

```
            }
    }
    printf("The number of words in string are:%d",count);
}
```
9. //WAP to Take in Two Strings and Display the Larger String without Using Built-in //Functions
```
#include<stdio.h>
#include<string.h>
int main()
{
    char str1[15];
    printf("Enter a string 1:");
    fgets(str1, sizeof(str1), stdin);
    char str2[15];
    printf("Enter a string 2:");
    fgets(str2, sizeof(str2), stdin);

    int i=0;
    while(str1[i]!='\0'){
            i++;
    }
    int len1=i;
    int j=0;
    while(str2[j]!='\0'){
            j++;
    }
    int len2=j;
    if(len1==len2){
            printf("String 1 is equal to string 2");
    }else if(len1<len2){
            printf("String 1 is smaller than string 2");
    }else{
            printf("String 1 is bigger tha string 2");
    }
}
```
10.
```
#include <stdio.h>
#include <string.h>

int main()
{
   char str[10];
   printf("Enter a string: ");
   scanf("%s",str);
   fflush(stdin);
```

```
    int i;
     int len = strlen(str);
    int flag = 0;

    for (i = 0; i < len / 2; i++)
    {
        if (str[i] != str[len - i - 1])
        {
            flag = 1;
            break;
        }
    }

    if (flag)
        printf("\"%s\" is not a palindrome\n", str);
    else
        printf("\"%s\" is a palindrome\n", str);

    return 0;
}
```