Assignment 11

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

```
#include<stdio.h>
void main(){

	char str[20];
	char ch;

	printf("Enter the Stirng:");
	scanf("%s",str);

	printf("Enter the character:");
	scanf(" %c",&ch);
	int i=0;
	while(str[i]!='\0'){
		if(str[i]== ch){
				printf("%c found at index %d",ch,i);
		}

		i++;
	}
}
```

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

```
#include<stdio.h>

void main(){

	char str[50];

	printf("Enter the String:");
	scanf("%s",str);

	printf("String before replacing:%s\n",str);

	int i=0;

	while(str[i]!='\0'){
			if(str[i]=='a'){

			str[i]='$';
		}
		i++;
	}

	printf("\nString after replacing:%s",str);

}
```

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

```
#include<stdio.h>
#include<string.h>
void main(){
        char str[50];
    int n;

        printf("Enter the String:");
        scanf("%s",str);

        printf("\nEnter the index:");
        scanf(" %d",&n);

        int len =strlen(str);
        int i;

        for(i=n;i<len-1;i++){

                str[i]=str[i+1];
        }

          str[len - 1] = '\0';
printf("\nString after removal:%s\n",str);

}
```

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

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

void main(){
	char str[50];
	 int len;
	printf("Enter the sting:");
	scanf("%s",str);

	len=strlen(str);
	int i=0;
	while(str[i]!='\0'){

		int temp=str[0];
		str[0]=str[len-1];
		str[len-1]=temp;

		i++;
	}


	printf("After swapping:%s",str);
}
```

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

```
#include <stdio.h>
#include <string.h>
 void main() {
    char str1[100];
    char vowels[] = "aeiouAEIOU";
    int count = 0, i = 0;



    printf("Enter the string: ");
    scanf("%s", str1);



    while (str1[i] != '\0') {
        if (strchr(vowels, str1[i])) {
            count++;
        }
        i++;
    }

    printf("Count of vowels in the string: %d\n", count);



}
```

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

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

void main(){

	char str[30];

	printf("Enter the string:");
	 scanf(" %[^\n]s", str);
	int i=0;

	while(str[i]!='\0'){

		if(str[i]==' '){

			str[i]='#';
		}

		i++;
	}

	printf("String after replacement:%s",str);
}
```

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

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

void removeOddIndexChars(char *str) {
    int i, j = 0;
    int length = strlen(str);
    for (i = 0; i < length; i += 2) {
        str[j++] = str[i];
    }
    str[j] = '\0';
}

int main() {
    char str[100];

    printf("Enter a string: ");
    scanf("%s", str);

    removeOddIndexChars(str);

    printf("String after removing odd index characters: %s\n", str);

    return 0;
}
```

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

```
#include <stdio.h>

 void main() {
    char str[200];
    int count = 0, i = 0;

    printf("Enter a string: ");
    scanf("%[^\n]", str);



    while (str[i] != '\0') {

        if ((i == 0 || str[i - 1] == ' ') && str[i] != ' ') {
            count++;
        }
        i++;
    }

    printf("Number of words: %d\n", count);


}
```

//9. WAP to Take in Two Strings and Display the Larger String without Using Built-in Functions

```
#include <stdio.h>
void main() {
   char str1[100], str2[100];
   int len1 = 0, len2 = 0, i;
 printf("Enter first string: ");
   scanf("%s", str1);

   printf("Enter second string: ");
   scanf("%s", str2);
for (i = 0; str1[i] != '\0'; i++) {
      len1++;
   }
   for (i = 0; str2[i] != '\0'; i++) {
      len2++;
   }
   if (len1 > len2) {
      printf("Larger string: %s\n", str1);
   } else if (len2 > len1) {
      printf("Larger string: %s\n", str2);
   } else {
      printf("Both strings are of equal length.\n");
   }

 }
```

//10. Write a program to check the string is palindrome or not.

```
#include <stdio.h>
void main() {
   char str[100];
   int i, length = 0, isPalindrome = 1;
   printf("Enter a string: ");
   scanf("%s", str);

     while (str[length] != '\0') {
      length++;
   }
    for (i = 0; i < length / 2; i++) {
     if (str[i] != str[length - 1 - i]) {
         isPalindrome = 0;
         break;
      }
   }
   if (isPalindrome) {
      printf("The string is a palindrome.\n");
   } else {
      printf("The string is not a palindrome.\n");
   }


}
```