

## Assignment - 17

#include <stdio.h> included in all answers.

```
(1) int main() {  
    char a[100], count=0, i;  
    gets(a);  
    for (i=0; a[i] != '\0'; i++)  
        count++;  
    printf("length of the string is %d", count);  
    return 0;  
}
```

```
(2) int main()  
{  
    char a[100], ch;  
    int i, count=0;  
    printf("Enter a string: ");  
    gets(a);  
    printf("\n Enter a character: ");  
    scanf("%c", &ch);  
    for (i=0; a[i] != '\0'; i++)  
    {  
        if (a[i] == ch)  
            count++;  
    }  
    printf("occurrence = %d", count);  
    return 0;  
}
```

```

3
{
    int main()
    {
        char a[100], ch;
        int i, count = 0;
        printf("Enter a string : ");
        gets(a);
        for (i = 0; a[i]; i++)
        {
            if (a[i] == 'a' || a[i] == 'A')
                count++;
            else
                if (a[i] == 'e' || a[i] == 'E')
                    count++;
            else
                if (a[i] == 'i' || a[i] == 'I')
                    count++;
            else
                if (a[i] == 'o' || a[i] == 'O')
                    count++;
            else
                if (a[i] == 'u' || a[i] == 'U')
                    count++;
        }
        printf("\n No of vowel is %d", count);
        return 0;
    }
}

```



```

4 int main()
{
    char a[100], ch;
    int i, count = 0;
    printf("Enter a string: ");
    gets(a);
    strupr(a);
    printf("string in uppercase: ");
    puts(a);
}

```

```

(5) int main()
{
    char a[100], ch;
    int i, count = 0;
    printf("Enter a string");
    gets(a);
    strlwr(a);
    printf("string in lowercase: ");
    puts(a);
}

```

```

6 int main() {
    char str[100];
    printf("Enter a string");
    gets(str);
    strrev(str);
    printf("%s", str);
    return 0;
}

```



⑦

```
int main()
```

```
{
```

```
    char a[100];
```

```
    int digit = 0, spec = 0; alpha = 0; i = 0;
```

```
    printf("Enter a string")
```

```
    fgets(a, 100, stdin);
```

```
    printf("%s\n", a);
```

```
    for (i = 0; a[i]; i++)
```

```
    {
```

```
        if (a[i] >= 48 && a[i] <= 57)
```

```
            digit++;
```

```
    else
```

```
    if (a[i] >= 65 && a[i] <= 90 || a[i] >= 97 && a[i] <= 122)
```

```
        alpha++;
```

```
    else
```

```
    if (a[i] != 10)
```

```
    {
```

```
        spec++; }
    }
```

```
    printf("digit in string = %d\n", digit);
```

```
    printf("alphabet = %d\n", alpha);
```

```
    printf("special character = %d\n", spec);
```

```
    return 0;
```

```
}
```



```

8 int main()
{
    char str1[10], str2[2];
    printf("Enter a string");
    fgets(str1, 10, stdin);
    printf("Original string: %s", str1);
    strcpy(str2, str1);
    printf("In after string copy: ");
    printf("%s", str2);
    return 0;
}

```

```

9 int main()
{
    char str[100];
    int i, j, temp, l=0;
    printf("Enter a string");
    fgets(str, 100, stdin);
    for(i=0; str[i]; i++)
        l++;
    for(i=0; i<l-2; i++)
    {
        for(j=i+1; j<l-1; j++)
        {
for if(str[i] > str[j]) {
            temp = str[i];
            str[i] = str[j];
            str[j] = temp; }
        }
    }
    puts(str);
    return 0;
}

```

```

Ex 10
int main()
{
    char a[100];
    int count = 0, temp, i, j, l = 0;
    gets(a);
    for (i = 0; a[i] != '\0'; i++)
        l++;
    for (i = 0; i < l; i++)
    {
        temp = a[i];
        count = 0;
        for (j = 0; j < l; j++)
        {
            if (temp != NULL)
            {
                if (temp == a[j])
                {
                    count++;
                    a[j] = NULL;
                }
            }
        }
        if (temp != NULL)
            printf("frequency of %c = %d\n", temp, count);
    }
    return 0;
}

```