

## Character Arrays



Program: Strings

```
#include <stdio.h>
int main()
{
    char str1[10], str2[10], t;
    int i=0, j=0;
    int count1=0, count2=0;
    scanf("%s", str1);
    scanf("%s", str2);
    while (str1[i] != '\0')
    {
        count1++;
        i++;
    }
    while (str2[j] != '\0')
    {
        count2++;
        j++;
    }
    printf("%d %d\n", count1, count2);
    printf("%s %s\n", str1, str2);
    t = str1[0];
    str1[0] = str2[0];
    str2[0] = t;
    printf("%s %s", str1, str2);
    return 0;
}
```

Sample Input  
abcd  
ef

Sample Output  
4 2  
abcdef  
efcd ab



**Program:** Printing word

```
#include <stdio.h>
int main()
{
    char s[1000];
    scanf("%s", s);
    for (int i = 0; s[i] != '\0', i++)
    {
        if (s[i] != ' ')
            printf("%c", s[i]);
        else
            printf("\n");
    }
    return 0;
}
```

Sample Input  
This is C

Sample Output  
This  
is  
C

~~Not a file~~



Program: Digit Frequency

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

```
int main()
```

```
{
```

```
char str[1000];
```

```
scanf("%s", str);
```

```
int hash[10] = {0, 0, 0, 0, 0, 0, 0, 0, 0, 0};
```

```
int temp;
```

```
for (int i = 0; str[i] != '\0'; i++)
```

```
{
```

```
temp = str[i] - '0';
```

```
if (temp <= 9 && temp >= 0)
```

```
hash[temp]++;
```

```
}
```

```
for (int i = 0; i <= 9; i++)
```

```
printf("%d ", hash[i]);
```

```
return 0;
```

```
}
```

Sample Input  
all412056

*not 021125*

Sample Output

0210111100



Program: Monk takes a walk

It includes <stdio.h>

```
int main()
{
    int t;
    scanf("%d", &t);
    while (t--)
    {
        char str[100000];
        int count = 0;
        scanf("%s", str);
        for (int i = 0; str[i] != '\0'; i++)
        {
            char c = str[i];
            if ((c == 'a') || (c == 'e') || (c == 'i') ||
                (c == 'o') || (c == 'u') || (c == 'A') || (c == 'E')
                || (c == 'I') || (c == 'O') || (c == 'U'))
                count++;
        }
        printf("%d\n", count);
    }
    return 0;
}
```

Sample Input

2  
nBZaasnm  
JHKISnZ+TL

Sample Output

2  
1

*2021/1/25*