

Usage of Functions

No: 7
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a] W.A.P to Calculate area & circumference of a circle using

Aim

To calculate area and circumference of circle

Algorithm

step 1: start the program

step 2: declare the variable

step 3: Get output of area and circumference in another function

step 4: print the output

step 5: stop.

Program

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

```
float a(float r)
```

```
float c(float r);
```

```
void main()
```

```
{
```

```
float r, area, circle;
```

```
printf("Enter the radius");
```

```
scanf("%f", &r);
```

```
area = a(r);
```

```
circumference = c(r);
```

```
printf("Area of circle %.d", area);
```

```
}
```

```
{
```

```
float a(float r)
```

```
{
```

```
float a = 3.14 * r * r;
```

```
return a;
```

```
}
```

```
float c(float r)
```

```
{
```

```
float c = 2 * 3.14 * r;
```

```
return c;
```

```
}
```

Result:

This program is executed successfully

Output

Enter Radius of circle: 44

Area of circle: 6079.040039

Circumference: 276.3200671

Usage of Functions

7: B

2] WAP to sort an array in a function "sortby" and print the max and min value.

Aim:

To write a program to sort an array on point max and min.

Algorithm:

step 1: Declare the variable and functions

step 2: Input the array

step 3: Create a fn sort by

step 4: Call the function

step 5: stop the program

Program

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

```
int sortby (int arr[], int num);
```

```
void main ()
```

```
{
```

```
    int n, i, s, arr[100];
```

```
    printf ("Enter the size of the array");
```

```
    scanf ("%d", &n);
```

```
    printf ("Enter the elements");
```

```
    for (i=0; i<n; i++)
```

```
{
```

```
    scanf ("%d", &arr[i]);
```

```
    printf ("The sorted array is");
```

```
    s = sortby (arr, n);
```

```
    printf ("The max element is %d\n", arr[n-1]);
```

```
    printf ("The min element is %d\n", arr[0]);
```

```
    int sortly (int arr[], int num)
```

```
{
```

```
    int i, step;
```

```
    arry[num]
```

```
    for (step=0; step<num-1; ++step)
```

```
{
```

```
    for (i=0; i<num-step-1; ++i)
```

```
{
```

output

Enter the size of the array: 5

Enter elements : 21

22

45

96

41

The Sorted array is

21

22

41

45

96

The max element is 96

The Min element is 21


```
if (array[i] > array[i+1])
```

```
{  
    int temp = array[i];
```

```
    array[i] = array[i+1];
```

```
    array[i+1] = temp;  
}
```

```
for(i=0; i<num; i++)
```

```
{
```

```
    printf("%d\n", array[i]);
```

```
}
```

Result

The program has been executed
Successfully.