AIM: Write a program find area of circle using macros

PROGRAM

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

#define PI 3.14
#define AreaCir(r) (3.14*r*r)

void main()
{
 int r;
 float area;
 clrscr();
 printf("Enter the radius of circle: ");
 scanf("%d", &r);
 area = AreaCir(r);
 printf("Area of circle: %0.3f", area);
 getch();
}
```

OUTPUT

Enter the radius of circle: 4
Area of circle: 50.240

AIM: Write a program find area of circle and rectangle using macros.

PROGRAM

```c
#include<stdio.h>
#include<conio.h>
#define length 5
#define area(r) (3.14*r*r)
void main()
{
 int bre, area_rec,r;
 float a;
 clrscr();
 printf("\nEnter the bredth of the rectangle: ");
 scanf("%d", &bre);
 area_rec=bre*length;
 printf("\nArea of the rectangle: %d", area_rec);
 printf("\nEnter the radius of the circle: ");
 scanf("%d", &r);
 a=area(r);
 printf("\nArea of Circle: %0.3f", a);
 getch();
}
```

OUTPUT

Enter the bredth of the rectangle: 5
Area of the rectangle: 25
Enter the radius of the circle: 2
Area of Circle: 12.560

AIM: Write a program to print Hello World, using Conditional Compilation.

PROGRAM

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

void main()
{
 clrscr();
 printf("\nHello");
 #ifdef avoid
 printf("\nword");
 printf("\nWorlds");
 printf("\nWorld's");
 #endif

 printf("\nWorld");
 getch();
}
```

OUTPUT

Hello
World

AIM: Write a program find marks of student, using Conditional Compilation

PROGRAM

```
#include<stdio.h>
#include<conio.h>
#define MARKS 77
void main()
{
clrscr();
#if MARKS>75
  printf("\nDistinction.");
#elif MARKS>60
  printf("\nFIRST CLASS");
#elif MARKS>50
  printf("\nSECOND CLASS");
#else
  printf("\n FAIL");

#endif
getch();
}
```
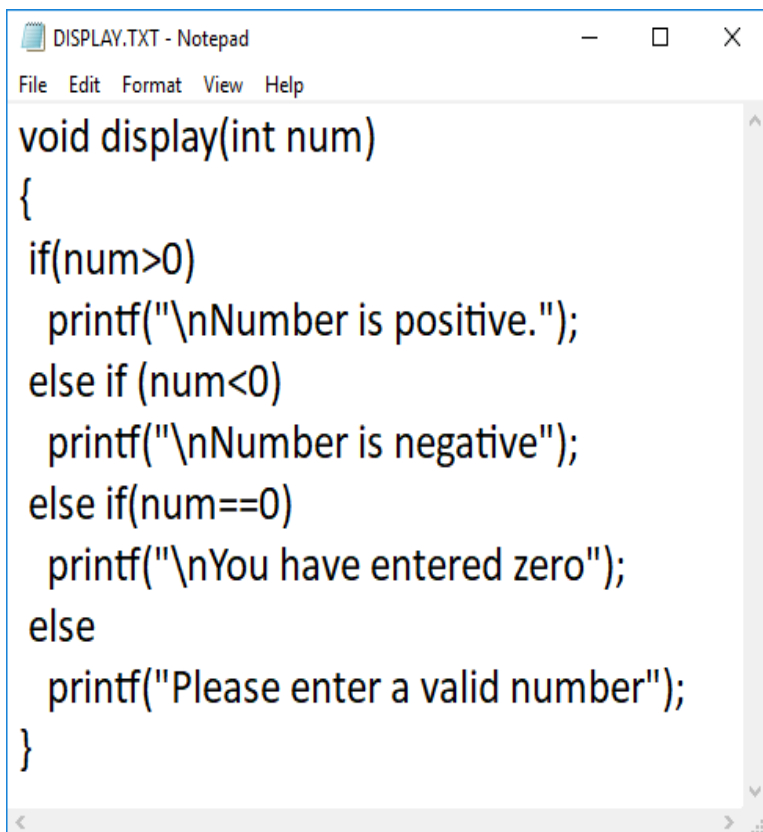
OUTPUT

Distinction

AIM: Write a program find if a number is +ive/-ive using file inclusion. (display.txt)

PROGRAM

```
#include<stdio.h>
#include<conio.h>
#include"C:display.txt"
void main()
{
  int num;
  clrscr();
  printf("Enter a number: ");
  scanf("%d", &num);
  display(num);
  getch();
}
```

OUTPUT

```
Enter a number: 2
Number is positive.
```

DISPLAY.TXT - Notepad — □ ✕

File Edit Format View Help

```
void display(int num)
{
 if(num>0)
  printf("\nNumber is positive.");
 else if (num<0)
  printf("\nNumber is negative");
 else if(num==0)
  printf("\nYou have entered zero");
 else
  printf("Please enter a valid number");
}
```

AIM: Write a program find if a number is odd/even using macros.

PROGRAM

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

#define even(n) (n%2==0)

void main()
{
  int n;
  clrscr();
  printf("Enter a number: ");
  scanf("%d", &n);
  if even(n)
    printf("%d is an even number.", n);
  else
    printf("%d is an odd number.", n);
  getch();
}
```

OUTPUT

```
Enter a number: 10
10 is an even number.
Enter a number: 15
15 is an odd number.
```