

# ***CENTRAL CALCUTTA POLYTECHNIC***

## **ASSIGNMENT**

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- ❖ PROJECT ON: 'C' PROGRAMMING

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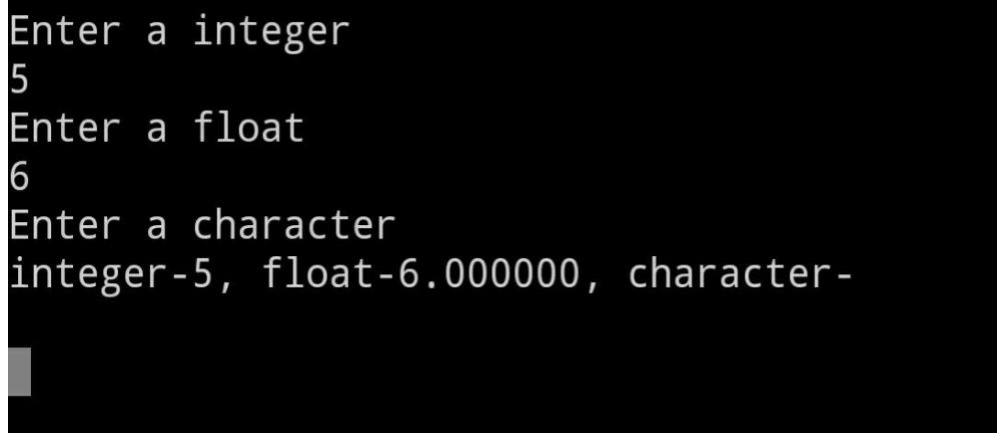
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INPUT CODE:.

```
#include<stdio.h>
main(){
int a;

float b;

char c;
printf("Enter a integer\n");
scanf("%d",&a);
printf("Enter a float\n");
scanf("%f",&b);
printf("Enter a character\n");
scanf("%c",&c);
printf("integer-%d, float-%f,character-%c\n",a,b,c);
}
OUTPUT:
```

A screenshot of a terminal window with a black background and white text. It shows the execution of the C program. The prompts 'Enter a integer', 'Enter a float', and 'Enter a character' are followed by user inputs '5', '6', and a space character respectively. The final output line is 'integer-5, float-6.000000, character-'.

```
Enter a integer
5
Enter a float
6
Enter a character
integer-5, float-6.000000, character-
```

INPUT CODE:. #include<stdio.h>

```
main(){  
    int centimeter;  
    float meter,kilometer;  
    printf("Enter your length in centimeter:\n");  
    scanf("%d",&centimeter);  
    meter=centimeter/100.00;  
    printf("centimeter to meter %.2f\n",meter);  
    kilometer=centimeter/100000.00;  
    printf("centimeter to kilometer %.2f\n",kilometer);  
}
```

OUTPUT:.

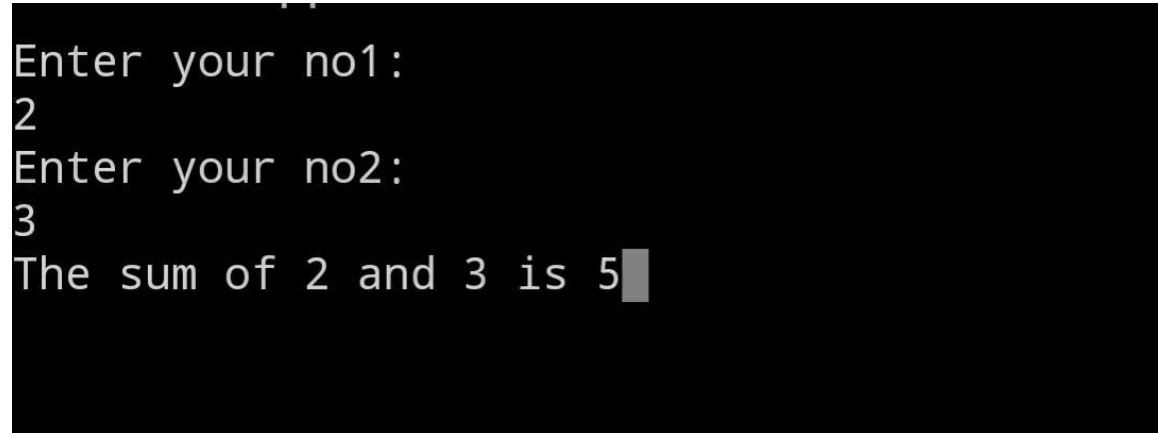
```
Enter your length in centimeter:  
7649373  
centimeter to meter 76493.73  
centimeter to kilometer 76.49
```

INPUT CODE:

```
#include<stdio.h>

main(){
int no1,no2;
printf("Enter your no1:\n");
scanf("%d",&no1);
printf("Enter your no2:\n");
scanf("%d",&no2);
int sum=no1+no2;
printf("The sum of %d and %d is %d", no1,no2,sum);
}
```

OUTPUT:

A screenshot of a terminal window with a black background and white text. The text shows the program's execution: it prompts for 'no1' and 'no2', receives inputs of 2 and 3 respectively, and then displays the result 'The sum of 2 and 3 is 5' followed by a cursor.

```
Enter your no1:
2
Enter your no2:
3
The sum of 2 and 3 is 5
```

```
INPUT CODE : #include<stdio.h>

main(){
int a,b;

    printf("Enter your two number\n");
    scanf("%d%d",&a,&b);

    int sum = a+b;

    printf("The sum of two number is %d\n", sum);

    int subt=a-b;

    printf("The subtraction of two number is %d\n", subt);

int mul=a*b;

    printf("The multiplication of two number is %d\n", mul);

    int div=a/b;

    printf("The division of two number is %d\n", div);
}
```

OUTPUT:.

```
Enter your two number
4
2
The sum of two number is 6
The subtraction of two number is 2
The multiplication of two number is 8
The division of two number is 2
```

```
INPUT CODE:.    #include<stdio.h>

main(){
int a,b,p,A;

    //Let a=length,b=breaddth,p=perimeter

    printf("Enter the length and breadth of rectangle
respectively\n");

    scanf("%d%d", &a,&b);

    p=2*(a+b);

    printf("The perimeter of rectangle is %d\n",p);

    A=a*b;

    printf("The area of rectangle is %d\n",A);

}
```

OUTPUT:.

```
Enter the length and breadth of rectangle r
espectively
4
5
The perimeter of rectangle is 18
The area of rectangle is 20
```

```
INPUT CODE:. #include<stdio.h>

main(){

    int r,d;

    float C,a;

    /*Let r=radius,C=circumference,d=diameter,a=area*/

    printf("Enter the radius of circle:\n");

    scanf("%d",&r);

    d=2*r;

    a=3.14*r*r;

    C=2*3.14*r;

    printf("The diameter of the circle is %d\n",d);

    printf("The area of the circle is %f\n",a);

    printf("The Circumference of the circle is %f",C);

}
```

OUTPUT:.

```
Enter the radius of circle:
3
The diameter of the circle is 6
The area of the circle is 28.260000
The Circumference of the circle is 18.84000
0
```



```
INPUT CODE:. #include<stdio.h>

main(){
float C,F,K;

    printf("Enter temperature in celcius:\n");
    scanf("%f",&C);
    F=((9*C)+160)/5;
    printf("Ferhenhite temperature is %.2f\n",F);
    K=(C+273.15);
    printf("Kelvin temperature is %.2f\n",K);
}
```

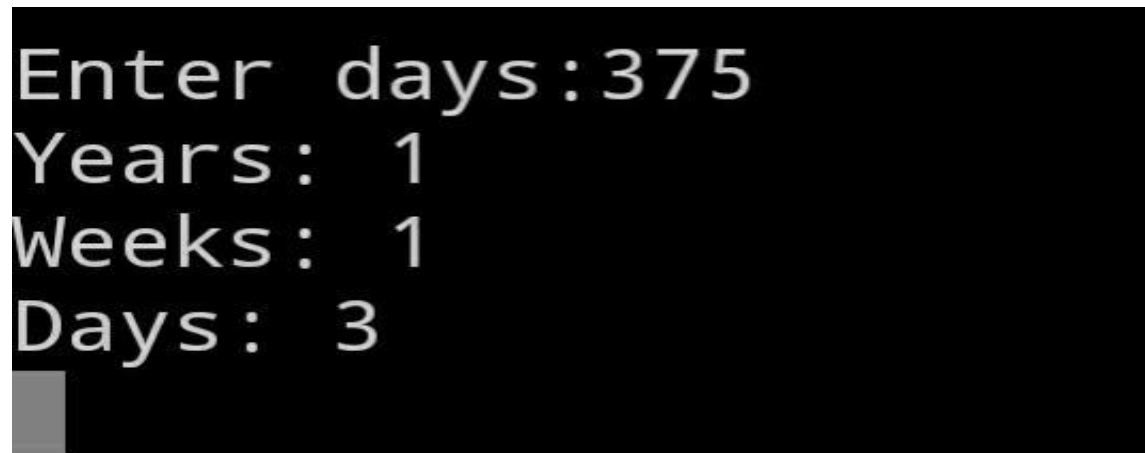
OUTPUT:.

```
Enter temperature in celcius:
100
Ferhenhite temperature is 212.00
Kelvin temperature is 373.15
```

INPUT CODE :. #include<stdio.h>

```
main(){  
    int D,Y,W;  
    printf("Enter days:");  
    scanf("%d",&D);  
    Y=D/365;  
    D=D%365;  
    W=D/7;  
    D=D%7;  
    printf("Years: %d\nWeeks: %d\nDays: %d\n",Y,W,D);  
}
```

OUTPUT:.



```
Enter days:375  
Years: 1  
Weeks: 1  
Days: 3
```

```
INPUT CODE:. #include<stdio.h>

#include<math.h>

main(){

    int x,y,z;

    printf("Enter two numbers:");

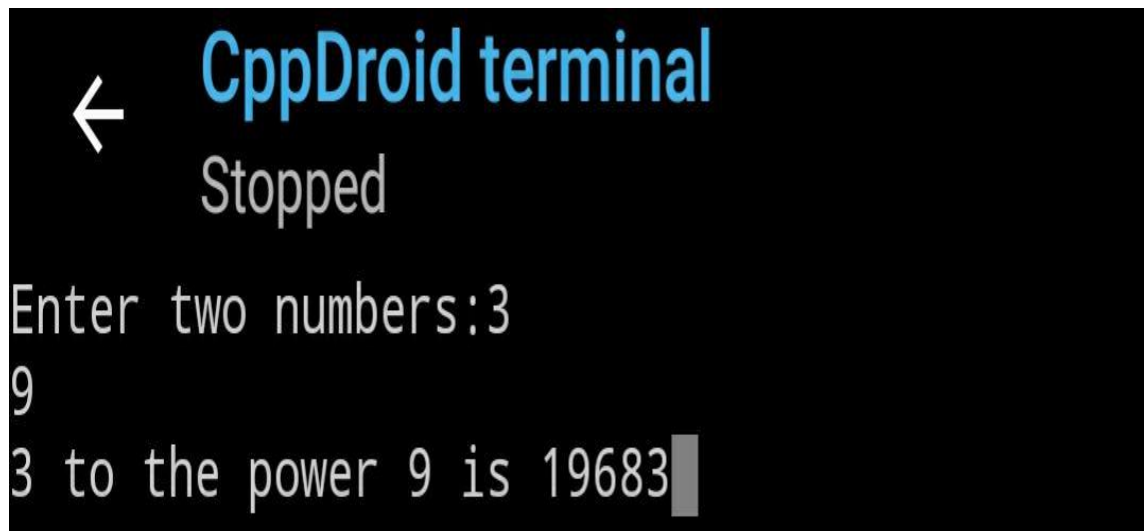
    scanf("%d%d",&x,&y);

    z=pow(x,y);

    printf("%d to the power %d is %d", x,y,z );

}
```

OUTPUT:.

A screenshot of a CppDroid terminal window. The title bar at the top says "CppDroid terminal" in blue. Below the title bar, there is a back arrow icon and the word "Stopped" in white. The terminal content shows the program's output: "Enter two numbers:3" followed by "9" on the next line, and then "3 to the power 9 is 19683" on the third line. A grey cursor bar is visible at the end of the last line of output.

```
← CppDroid terminal
Stopped
Enter two numbers:3
9
3 to the power 9 is 19683
```

```
INPUT CODE:. #include<stdio.h>

#include<math.h>

main(){

    int x;

    float sr;

    printf("Enter the number:");

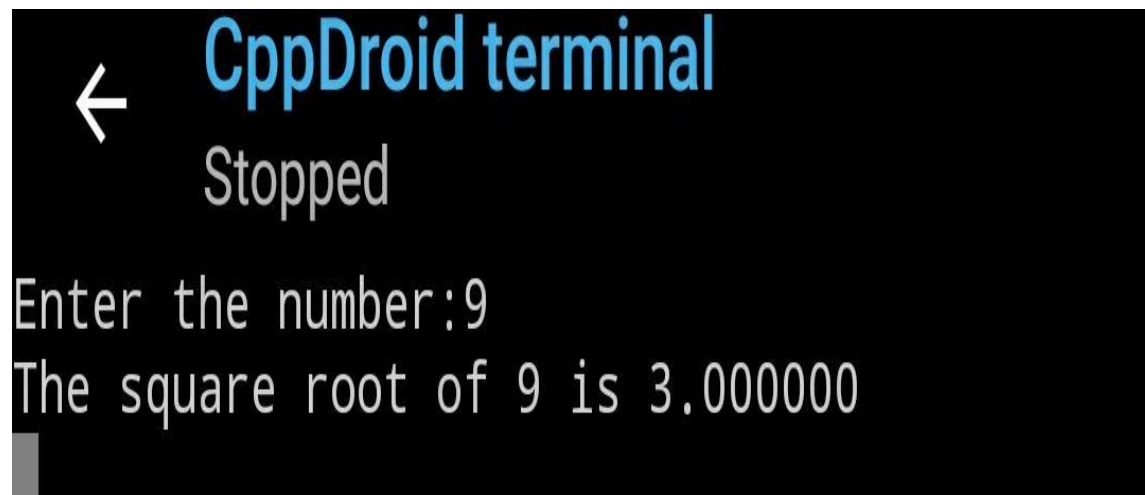
    scanf("%d",&x);

    sr=sqrt(x);

    printf("The square root of %d is %f\n", x,sr);

}
```

OUTPUT:.

A screenshot of a CppDroid terminal window. The window has a black background. At the top left, there is a white left-pointing arrow. To its right, the text "CppDroid terminal" is written in a light blue font. Below this, the word "Stopped" is written in a light gray font. The terminal shows the output of a C program: "Enter the number:9" followed by "The square root of 9 is 3.000000". A small gray vertical bar is visible at the bottom left of the terminal window.

```
← CppDroid terminal
Stopped
Enter the number:9
The square root of 9 is 3.000000
```

```
INPUT CODE:. #include<stdio.h>

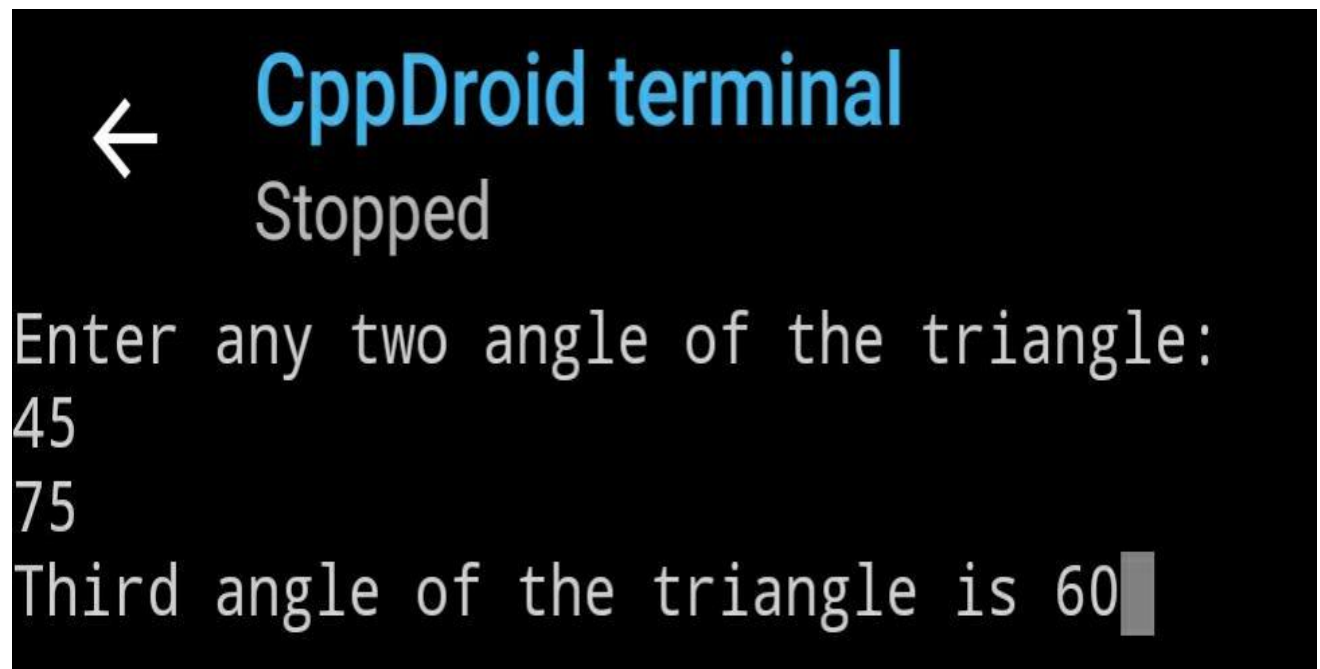
main(){
int A,B,C;

/*Let three angle of a triangle is    A,B,C*/
printf("Enter any two angle of the triangle:\n");
scanf("%d%d", &A,&B);

C=180-(A+B);

printf("Third angle of the triangle is %d",C);
}
```

OUTPUT:.

A screenshot of a terminal window titled "CppDroid terminal" with a back arrow icon. The window shows the output of the C program. It prompts "Enter any two angle of the triangle:" and receives inputs "45" and "75" on separate lines. The final output is "Third angle of the triangle is 60" followed by a cursor bar.

```
← CppDroid terminal
Stopped
Enter any two angle of the triangle:
45
75
Third angle of the triangle is 60
```

```
INPUT CODE:. #include<stdio.h>

main(){
int base,height;

float area;

printf("Enter base and height of a triangle respectively:\n");

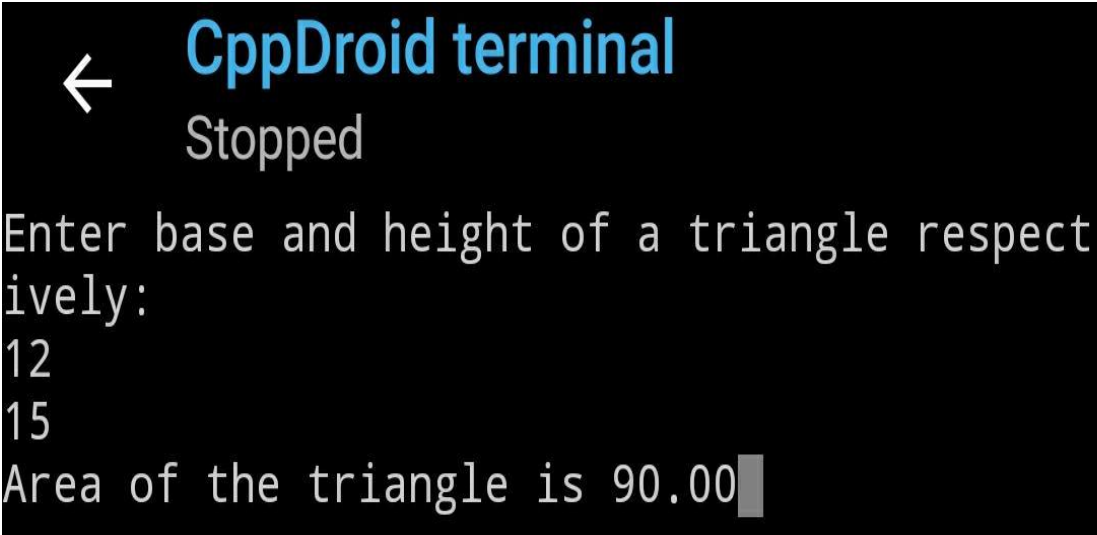
scanf("%d%d", &base,&height);

area=0.5*base*height;

printf("Area of the triangle is %.2f",area);

}

OUTPUT:.
```

A screenshot of a CppDroid terminal window. The window has a black background with a blue title bar that says "CppDroid terminal" and a white back arrow icon. Below the title bar, the text "Stopped" is displayed. The terminal shows the output of the C program: "Enter base and height of a triangle respectively:", followed by the user input "12" and "15" on separate lines. The final output is "Area of the triangle is 90.00" with a white cursor block at the end.

```
← CppDroid terminal
Stopped
Enter base and height of a triangle respectively:
12
15
Area of the triangle is 90.00█
```

```
INPUT CODE:. #include<stdio.h>

#include<math.h>

main(){
int side;

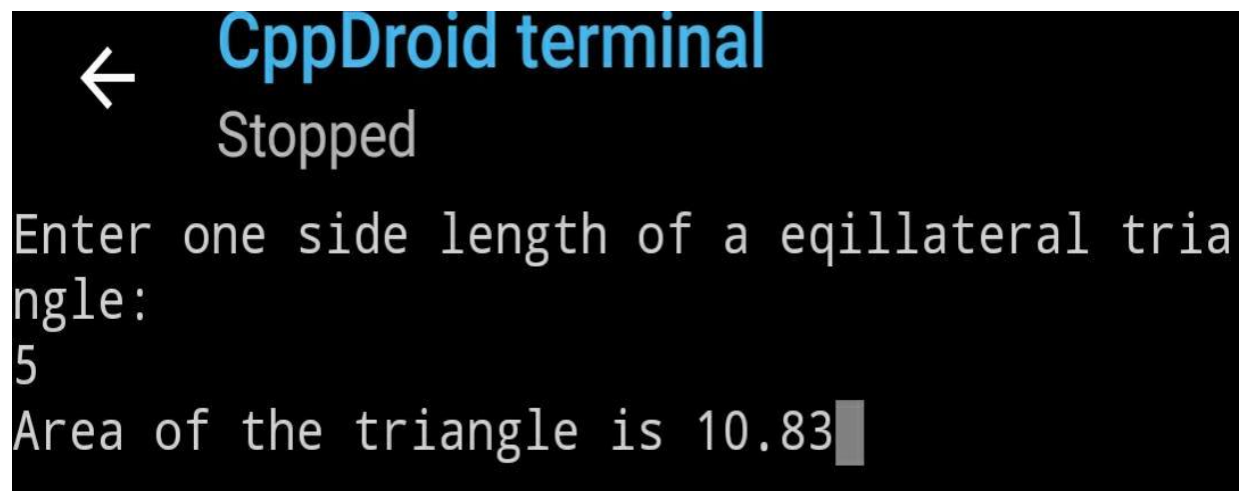
float area;

printf("Enter one side length of a eqillateral triangle:\n");
scanf("%d", &side);

area=(pow(3,0.5)*side*side)/4;

printf("Area of the triangle is %.2f",area);
}
```

OUTPUT:.

A screenshot of a CppDroid terminal window. The title bar at the top says "CppDroid terminal" in blue. Below the title bar, there is a back arrow icon and the word "Stopped" in white. The terminal content shows the program's execution: it prompts "Enter one side length of a eqillateral triangle:", the user enters "5", and the program outputs "Area of the triangle is 10.83" followed by a cursor block.

```
← CppDroid terminal
Stopped
Enter one side length of a eqillateral triangle:
5
Area of the triangle is 10.83█
```

```
INPUT CODE:. #include<stdio.h>

#include<math.h>

main(){
int B,E,P,C,M;

float total,avg,percent;

printf("Enter five sujet number one by one:\n");

scanf("%d%d%d%d%d", &B,&E,&P,&C,&M);

total=B+E+P+C+M;

printf("Total number is %.2f\n",total);

avg=(B+E+P+C+M)/5.0;

printf("Average number is %.2f\n",avg);

/*here average and percent will be same*/
}
```

OUTPUT:.

```
Enter five sujet number one by one:
45
76
89
70
47
Total number is 327.00
Average number is 65.40
```



```
INPUT CODE:. #include<stdio.h>

main(){
int a,b,c;

// Let a=capitals,b=ROT,c=year
printf("Enter value of capitals\n");
scanf("%d",&a);
printf("Enter value of rate of interest\n");
scanf("%d",&b);
printf("Enter value of year\n");
scanf("%d",&c);
int d=(a*b*c)/100;
printf("simple interest is %d",d);
}
```

OUTPUT:.

```
Enter value of capitals
1000
Enter value of rate of interest
5
Enter value of year
1
simple interest is 50
```

```

INPUT CODE:. #include<stdio.h>

#include<math.h>

main(){

int P,R,N;

float A,B;

/*Let P=Initial capital, R=rate of interest,N=time period,
A=initial capital with interest, B=compound interest */

printf("Enter capitals:\n");

scanf("%d",&P);

printf("Enter rate of interest:\n");

scanf("%d",&R);

printf("Enter the time period:\n");

scanf("%d",&N);

A=P*pow((1+R/100.0),N);

B=(P*pow((1+R/100.0),N))-P;

printf("The compound interest of this amount is %.2f\n",A);

printf("Only interest is %.2f",B);

}

```

OUTPUT:.

```
Enter capitals:
12456
Enter rate of interest:
12
Enter the time period:
3
The compound interest of this amount is 174
99.78
Only interest is 5043.78
```