

Example 1

/* A program to find the area and perimeter of a circle */

Solution

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

```
int main()
```

```
{
```

```
    //variable declaration
```

```
    int r;
```

```
    float p;
```

```
    float A;
```

```
    //reading data
```

```
    printf ("\ninput radius of the circle: \t");
```

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

```
    // calculation
```

```
    p = 2*3.143*r;
```

```
    A = 3.142*r*r;
```

```
    //output
```

```
    printf ("\nPerimeter of the circle = %d", p);
```

```
    printf ("\nArea of the cicle is = %f", A );
```

```
    return 0;
```

```
}
```

Example 2

/* A program to accept the salary and age of a person and display it as output */

Solution

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

```
int main ()
```

```
{
```

```
    //declaring variable
```

```
    int salary;
```

```
    int age;
```

```
    //reading data
```

```
    printf ("input salary here:\t ");
```

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

```
    printf ("input age here:\t ");
```

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

```
    //output
```

```
    printf ("salary = %d" , salary);
```

```
    printf ("\nage = %d" , age);
```

```
}
```

Example 3

/* A program to evaluate the expression $z = a*b + (c/d) - e*f$ */

Solution

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

```
int main ()
```

```
{
```

```
    //declaring variables
```

```
    int a = 10;
```

```
    int b = 10;
```

```
    float c = 15.75;
```

```
    int d = 4;
```

```
    int e = 2;
```

```
    float f = 5.6;
```

```
    float z = a*b+(c/d)-e*f;
```

```
    //output
```

```
    printf ("The value of  $a*b + (c/d) - e*f$  is %f", z);
```

```
}
```

Example 4

/* Write a program to evaluate the net salary of an employee given the following constraints:

Basic salary = \$1200,

DA = 12% of basic salary,

HRA = \$150,

TA = \$120,

Others = \$450,

Tax cuts - a) PF = 14% of basic salary b) IT = 15% of basic salary

Net salary = basic salary + DA + DHA + TA + Others - (PF + IT)*/

/* A program to evaluate the net salary given some constraint */

Solution

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

```
int main ()
```

```
{
```

```
    //declaring variable
```

```
    int basic_salary;
```

```
    int DA;
```

```
    int HRA;
```

```
    int TA;
```

```
    int others;
```

```
    int PF;
```

```
    int IT;
```

```
    int net_salary;
```

```
    //assigning value to variable
```

```
    basic_salary = 12000;
```

```
    DA = 0.12*12000;
```

HRA = 150;

TA = 120;

others = 450;

PF = 0.14*12000;

IT = 0.15*12000;

//assigning operation to variables using variable net_salary

net_salary = basic_salary + DA + HRA + TA + others - (PF+IT);

//output

printf ("\nThe net salary of the employee is %d", net_salary);

}

Example 5

/* A program to accept and add three numbers */

Solution

```
#include <stdio.h>

int main ()
{
    //declaring variables
    int a;
    int b;
    int c;
    int res;

    //inputting a and accepting data
    printf ("Enter three numbers here:\n");
    scanf ("%d", &a);
    scanf ("%d", &b);
    scanf ("%d", &c);

    //assigning value
    res = a+b+c;

    //output
    printf ("The sum of the numbers is %d", res);
}
```

Example 5

/* A program to ask for a person's first name and last name and print it out in the format first name last name*/

Solution

```
#include <stdio.h>

int main ()
{
    //variable declaration
    char first_name[20];
    char last_name[20];

    //inputing and reading data
    printf ("Enter your first name: ");
    scanf ("%s", &first_name);
    printf ("Enter your last name: ");
    scanf ("%s", &last_name);

    //output
    printf ("\nYour name is %s %s", last_name, first_name);
}
```