1.Write a C program to add two integers.

IPO:
Input- Numbers says to add two integers
Process-Adding of numbers of a,b and output the variable a,b.
Output-Output the variable a,b

Program:

```
#include<stdio.h>
int main()
{
   int a,b,sum=0;
   printf("enter any two integer:\n");
   scanf("%d %d",&a,&b);
   sum=a+b;
   printf("the sum of %d ",a+b);
   return 0;
}
```

Output
1

2.Write a program to swap two numbers using a temporary variable.

IPO:

Input-Number says to swap two numbers.
Process-swapping of numbers of a,b using temporary variable and output the variable.
Output-output the variable.

Program:

```
#include<stdio.h>
int main()
{
   int a,b,temp;
   printf("enter two numbers");
   scanf("%d%d",&a,&b);
   printf("before swapping:%d %d",a,b);
   temp=a;
   a=b;
   b=temp;
   printf("after swapping:%d %d",a,b);
```

```
  return 0;
}
```

Output

```
enter two numbers
10
20
before swapping:10 20after swapping:20 10
```

3.Write a program to swap two numbers without using a temporary variable.

IPO:
Input-Number says to swap two numbers.
Process-swapping of numbers of a,b without temporary variable and output the variable.
Output-output the variable.

Program:

```
#include<stdio.h>
int main()
{
   int a,b;
   printf("enter two numbers");
   scanf("%d %d",&a,&b);
   printf("before swapping:%d %d",a,b);
   a=a+b;
   b=a-b;
   a=a-b;
   printf("after swapping:%d %d\n",a,b);
  return 0;
}
```

Output:
1

4.Write a program to find the ASCII value of a character.

IPO:
Input-Number says to find the ASCII value of a character
Process- finding the ASCII value of a character and output the variable.
Output-output the variable.

Program:

```
#include<stdio.h>
int main()
{
   char c;
   printf("enter a character");
   scanf("%c",&c);
   printf("ASCII value of %c = %d",c,c);
  return 0;
}
```

Output:
1

5.Write a program to calculate the area and perimeter of a rectangle.

IPO:
Input-Number says to calculate the area and perimeter of a rectangle
Process- To calculate the area and perimeter of a rectangle and output the variable.
Output-output the variable.

Program:

```
#include<stdio.h>
int main()
{
   int a,b,area,perimeter;
   printf("enter slides:\n");
   scanf("%d %d",&a,&b);
   area=a*b;
   perimeter=2*(a+b);
   printf("area=%d\n",area);
   printf("perimeter=%d",perimeter);
  return 0;
}
```

Output:

```
enter slides:
20
4
area=80
perimeter=48
```

6.Write a program to compute the simple interest.

IPO:
Input-Number says to compute the simple interest
Process- Computing the simple interest and output the variable.
Output-output the variable.

Program:

```
#include<stdio.h>
int main()
{
  float p,r,t,si;
   printf("enter principle amount:");
   scanf("%f",&p);
   printf("enter rate of interest:");
   scanf("%f",&r);
   printf("enter time period:");
  scanf("%f",&t);
  si=(p*r*t)/100;
   printf("simple interest:%.2f\n ",si);
  return 0;
}
```

Output:
1

7.Write a program to convert temperature from Celsius to Fahrenheit.

IPO:
Input-Number says to convert temperature from Celsius to Fahrenheit.
Process- convert temperature from Celsius to Fahrenheit and output the variable.
Output-output the variable.

Program:

```
#include<stdio.h>
int main()
{
  float celsius,fahrenheit;
   printf("enter temperature in celsius:");
   scanf("%f",&celsius);
   fahrenheit=(celsius*9.0/5.0)+32;
   printf("Temperature in fahrenheit:%.2f\n",fahrenheit);
  return 0;
}
```

Output:
1

8.Write a program to find the quotient and remainder of two integers.

IPO:
Input-Number says to find the quotient and remainder of two integers.
Process- To find the quotient and remainder of two integers and output the variable.
Output-output the variable.

Program:

```
#include<stdio.h>
int main()
{
  int num1,num2,q,r;
   printf("\n enter the number 1:");
   scanf("\n%d",&num1);
```

```
   printf("\n enter the number 2:");
   scanf("\n%d",&num2);
   q=num1/num2;
   r=num1%num2;
   printf("\n the quotient is %d",q);
   printf("\n the remainder is %d",r);
  return 0;
}
```

Output:
1

9.Write a program to check whether a number is even or odd.

IPO:
Input-Number says to check whether a number is even or odd
Process- To check whether a number is even or odd and output the variable.
Output-output the variable.

Program:

```
#include<stdio.h>
int main()
{
   int a;
   scanf("%d",&a);
   if(a%2==0)
   {
      printf(" %d number is even \n",a);
   }
   else
   {
      printf("%d number is odd \n",a);
   }
   return 0;
}
```

Output:

```
33
33 number is odd
```

```
88
 88 number is even
```

10.Write a program to calculate the square and cube of a number.

IPO:

Input-Number says to calculate the square and cube of a number.

Process- To calculate the square and cube of a number and output the variable.

Output-output the variable.

Program:

```
#include<stdio.h>
int main()
{
   int n,s,c;
   printf("enter number:");
   scanf("%d",&n);
   s=n*n;
   c=n*n*n;
   printf("%d %d",s,c);
   return 0;
}
```

Output:

```
enter number:7
49 343
```