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
Enter any two integer;
7
7
The sum of 14
```

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;
}
Out put
     Enter two number
```

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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:
Enter two number
40
50
Before swapping:40 50after swapping:50 40
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:

Enter a character
```

ASCII value of z=122

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:
enter principle amount:20000
enter rate of interest:9
enter time period:2
Simple interest:3600.00
```

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:
enter temperature in celsius: 40.00
Temperature in fahrenheit:104.00
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:
Enter the number 1:20
enter the number 2:5
The quotient is 4
The reminder is 0
```

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:
88
88 number is even
```

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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

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