Day : Basic Input/Output and Operators (2-8-2025)

1.write a C program to add two integers.

Input: get  3 values as input say a,b,c.
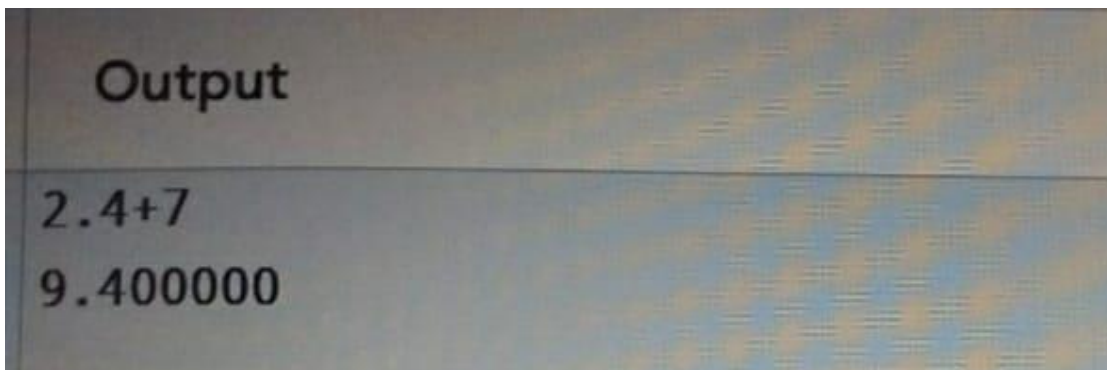
Process: we add two integers, assigned the value for a,b , the formula c=a+b.

Output: the output store in c.

Program:

```
#include<stdio.h>
void main()
{
   float a,b,c;
   scanf("%f%f",&a,&b);
   c=a+b;
   printf("%f",c);
}
```

Output

2.4+7
9.400000

2.write a program to swap two numbers using a temporary variable.
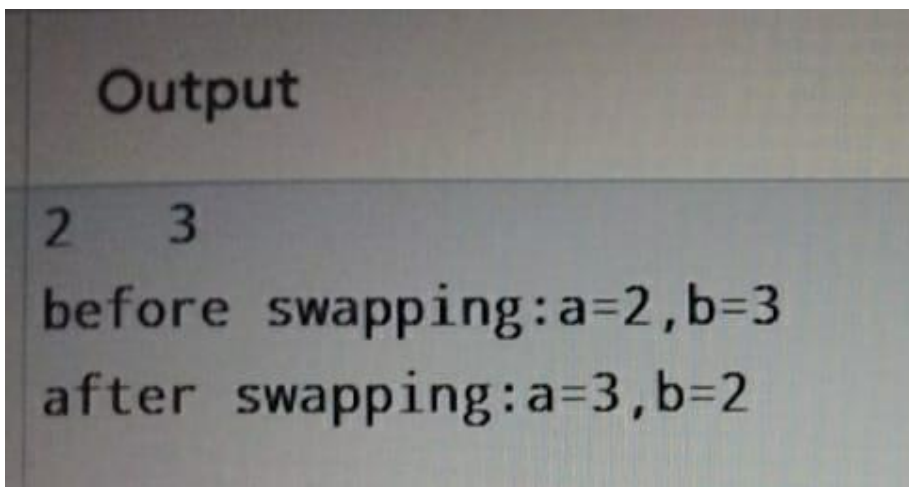
Input: to get  3 values as  input ,say a,b,temp.

Process: to swap two numbers using  temporary third variable is introduced to hold the value of one variable swap.

Output: to exchange the two values.

Program:

```c
#include <stdio.h>
void main()
{
  int a,b,temp;
  scanf("%d%d",&a,&b);
printf("before swapping:a=%d,b=%d\n",a,b);
  {
    temp=a;
    a=b;
    b=temp;
  }
  printf("after swapping:a=%d,b=%d\n",a,b);
}
```

Output

2   3
before swapping:a=2,b=3
after swapping:a=3,b=2

3.write a program to swap two numbers without using a temporary variable.
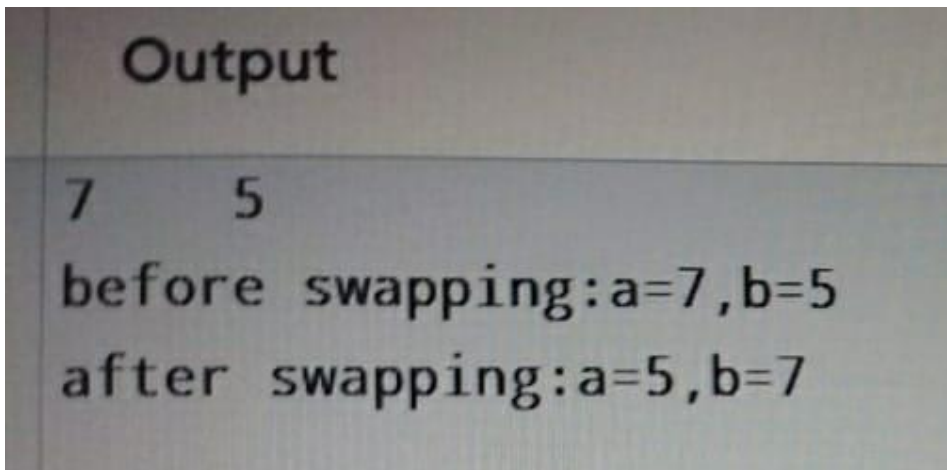
Input: get 3 values as input,say a,b,c.

Process: print before swapping a=a+b;b=a-b;a=a-b; after that the value will swapped.

Output: the value will swapped.

Program:

#include<stdio.h>

void main()

{

   int a,b,c;

   float d;

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

   d=(a*b*c)/100;

   printf("%f",d);

}

```
Output

7    5
before swapping:a=7,b=5
after swapping:a=5,b=7
```

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

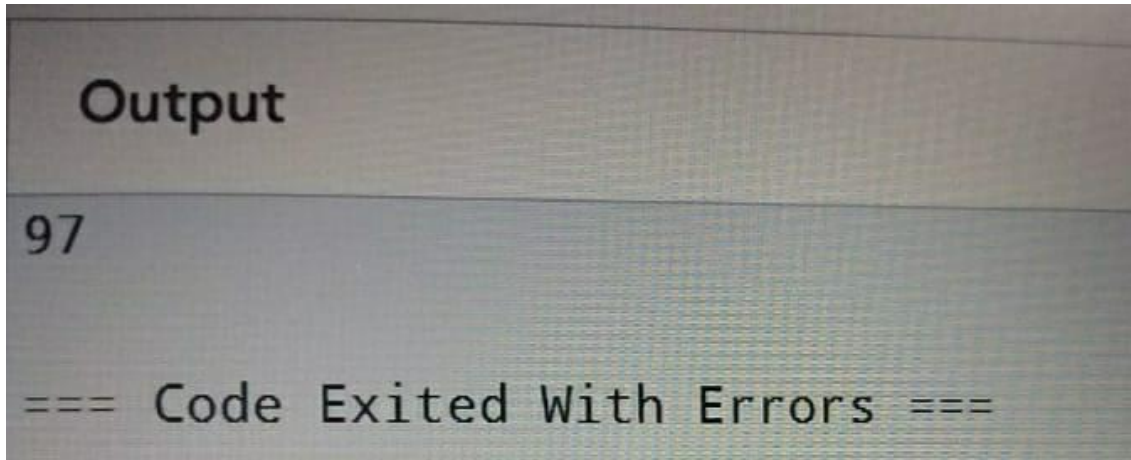   Input:  to get ASCII program by using char ,printf and stores in character varaiable.
   Process:to print char variable using modulor d,c convert char into ASCII value.
   Output:the value using printf(n).
   Program:
   #include <stdio.h>
   void main()
   {
    int n,a;

```c
    char c='a';
    n=c;
    printf("%d",n);
}
```

Output

97

=== Code Exited With Errors ===

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

Input: get 4 values as input say area, perimeter,l,w.

Process:to find the area and perimeter of a rectangle by using area=l*w;perimeter2*(l+w).

Output: the output in area and perimeter.

Program:

```c
#include<stdio.h>

void main()

{

    float l,w,area,perimeter;

    scanf("%f%f",&l,&w);

    {

    area=l*w;

    perimeter=2*(l+w);

    }

    printf("Area = %.2f\n", area);
```
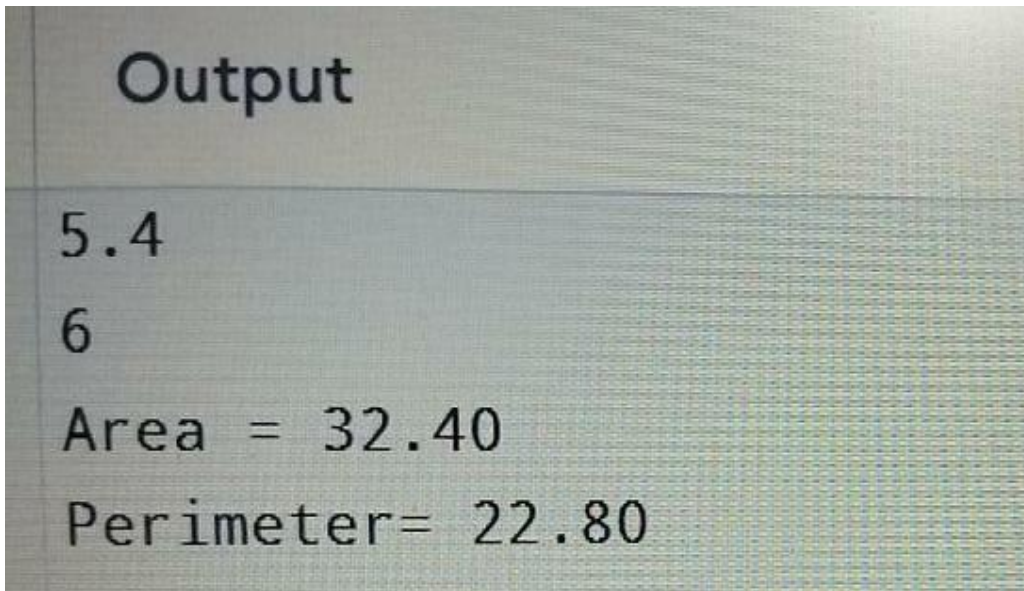
```
printf("Perimeter= %.2f\n", perimeter);
}
```

Output

5.4

6

Area = 32.40

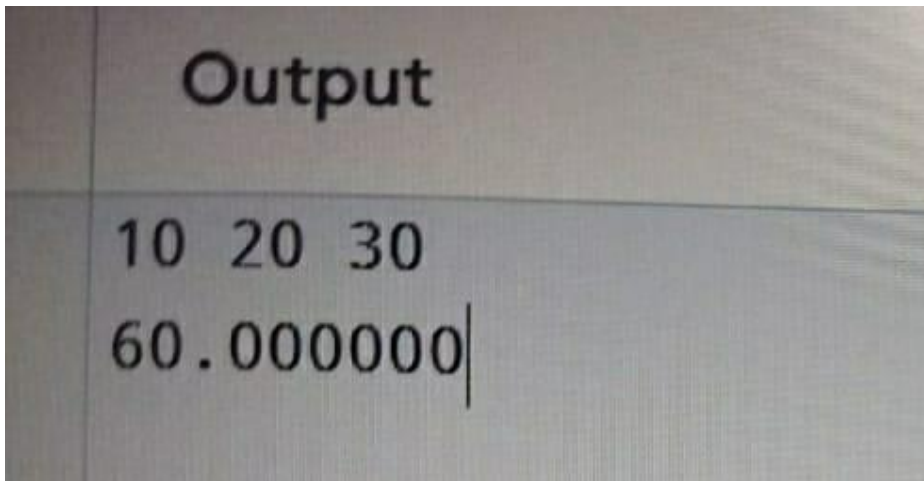Perimeter= 22.80

6.Write a program to compute the simple interest

Input: to get 3 values as input say a,b,c.

Process: to fint the simple interest by d=(a*b*c)/100.

Output:the out put is store in d.

Program:

```
#include<stdio.h>
void main()
{
    int a,b,c;
    float d;
    scanf("%d%d%d",&a,&b,&c);
    d=(a*b*c)/100;
    printf("%f",d);
}
```

## Output

10  20  30

60.000000|

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

Input: get 2 values as input say a,b.

Process: to convert temperature from celcius to Fahrenheit by  b=(a*9/5)+32.

Output:the output will be store in b.

Program:

```
#include<stdio.h>
void main()
{
   float a,b;
   scanf("%f",&a);
   b=(a*9/5)+32;
   printf("%f",b);
}
```
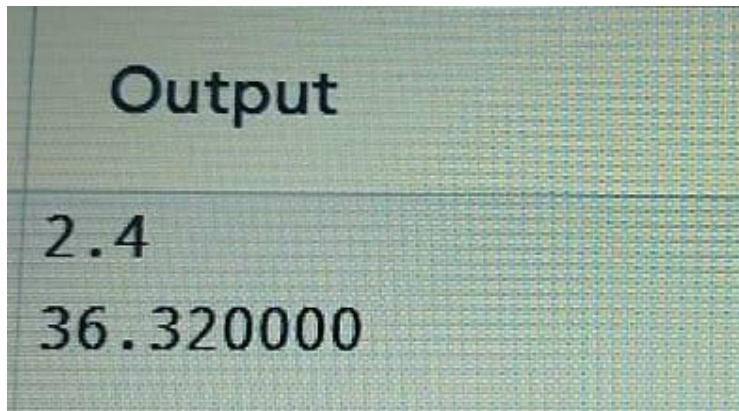
Output

2.4

36.320000

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

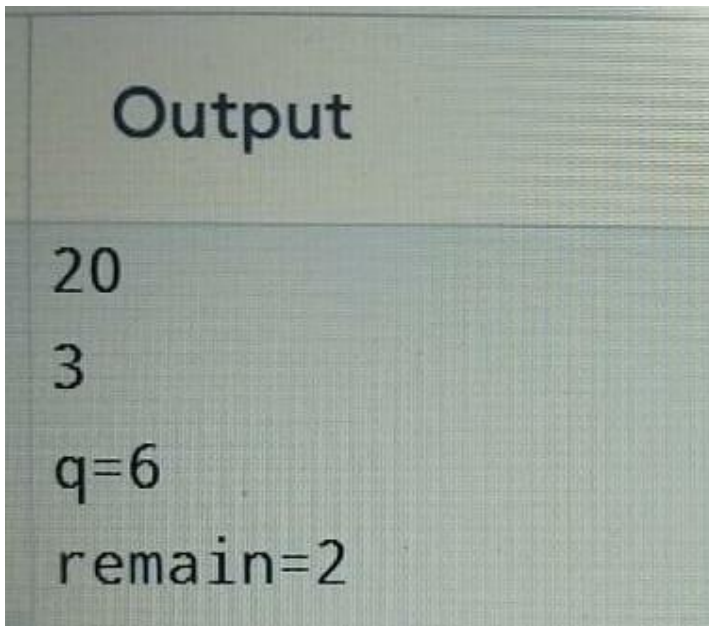   Input:get 4 values as input , say divide,divisor,remain,q.

   Process:q equal to divide/divisor;remain equal to divide modulor divisor.

   Output: the out will be store in q and remain.

   Program:

   #include<stdio.h>

   void main()

   {

     int divide,divisor,remain,q;

     scanf("%d%d",&divide,&divisor);

     {

       q=divide/divisor;

       remain=divide%divisor;

     }

           printf("q=%d\n",q);

     printf("remain=%d\n",remain);

   }

Output

20
3
q=6
remain=2

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

Input: get 1 value as input, say a.

Process: assigned the value for a and  if(a%==0) print even,else, print odd.
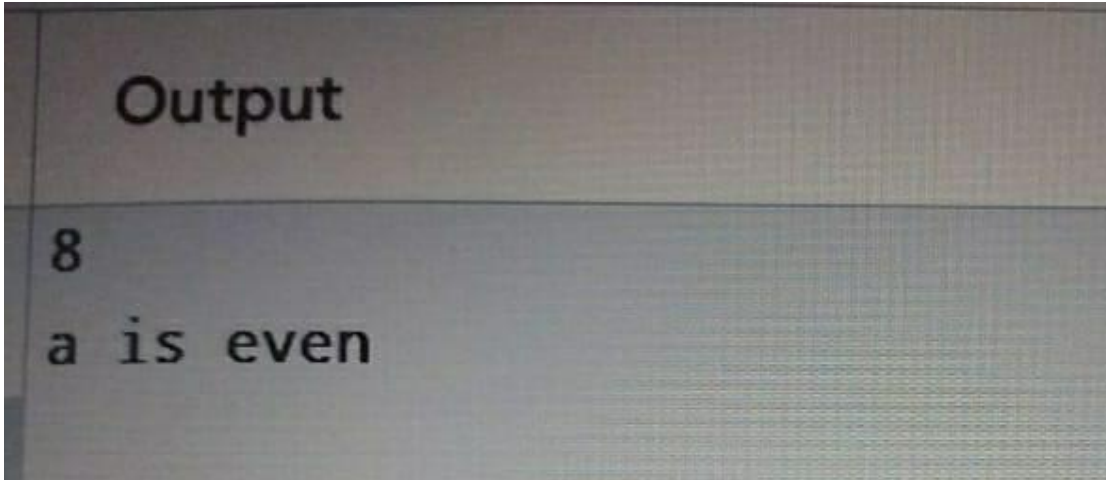
Output: a is even or odd.

Program:

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

```
  {
     printf("a is odd");
  }
}
```

**Output**

8

a is even

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

Input: get 3 values as input, say a,square,cube.

Process: assigned the value value for a, square equal to a *a , cube equal to a*a*a.

Output:the output will be store in square, cube.

Program:

```
#include<stdio.h>
void main()
{
   float a,square,cube;
   scanf("%f",&a);
   square=a*a;
   cube=a*a*a;
   printf("square=%f\n",square);
   printf("cube=%f\n",cube);
```

}

| Output |
| --- |
| 4.5<br>square=20.250000 cube=91.125000 |