Day(02/08/2025)

1. **Write a c program to add two integers.**

IPO:

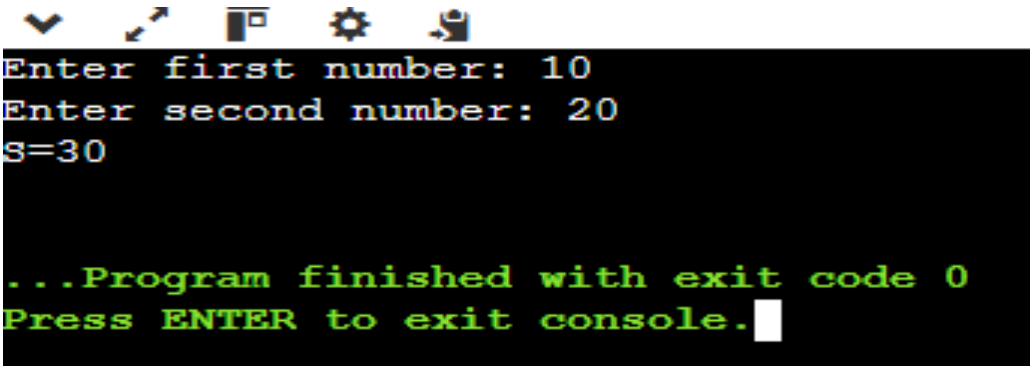
Input= variable x,y,z.

Process= addition (relational operator)

output= z=x+y

Code:

```
#include <stdio.h>
void main()
{
   Int x,y,s;
   printf("Enter first number: ");
   scanf("%d", &x);
   printf("Enter second number: ");
   scanf("%d", &y);
   s=x+y;
   printf("S=%d\n",s);
}
```



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

IPO:

Input= variable a,b,c.

Process= temporary variable c is assign to a, ais assign to b, a is assign to c.

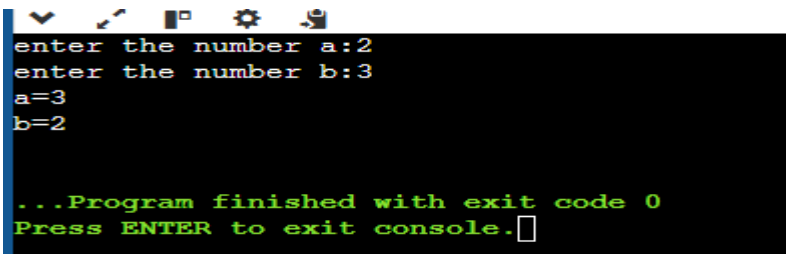
output= c=a

a=b

a=c

Code:

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



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

IPO:

Input: variable x,y

Process: a is assigned to a+b, b is assigned a-b, then a is assigned to a-b.

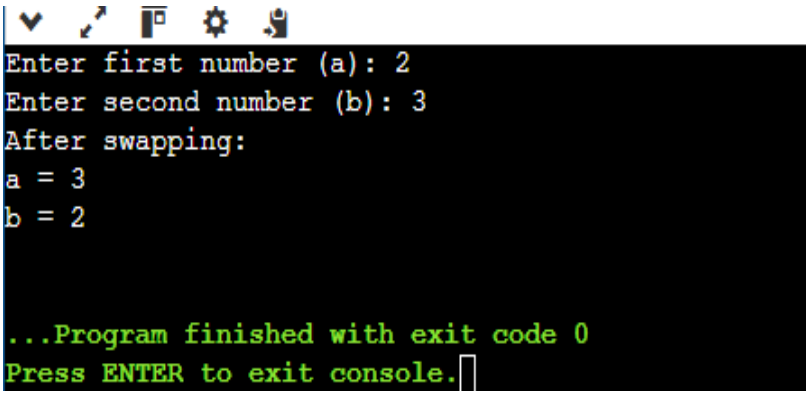
output: a= a+b

b=a-b

a=a-b

Code:

```
#include <stdio.h>
int main()
{
   int a,b;
   printf("Enter first number (a): ");
   scanf("%d", &a);
   printf("Enter second number (b): ");
   scanf("%d", &b);
   a = a + b;
   b = a - b;
   a = a - b;
   printf("After swapping:\n");
   printf("a = %d\n", a);
   printf("b = %d\n", b);
}
```



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

IPO:

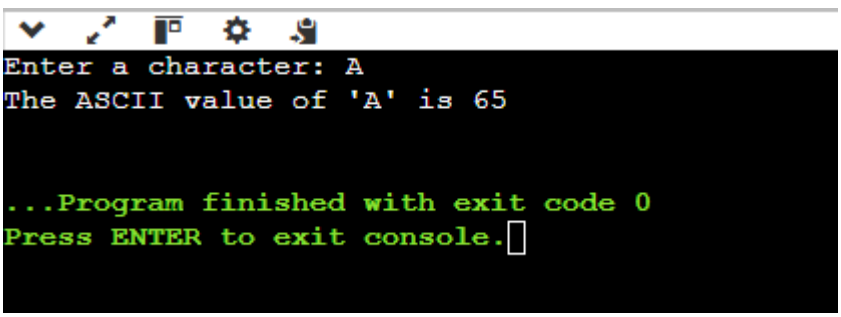
Input: character ch.

process: convert character into ASCII value using int char ch

Output: display the ASCII value for a given character.

Code:

```
#include <stdio.h>
void main()
{
   char ch;
   printf("Enter a character: ");
   scanf("%c", &ch);
   printf("The ASCII value of '%c' is %d\n", ch, ch);
}
```



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

IPO:

Input: variable l,w l is length ,w is width.

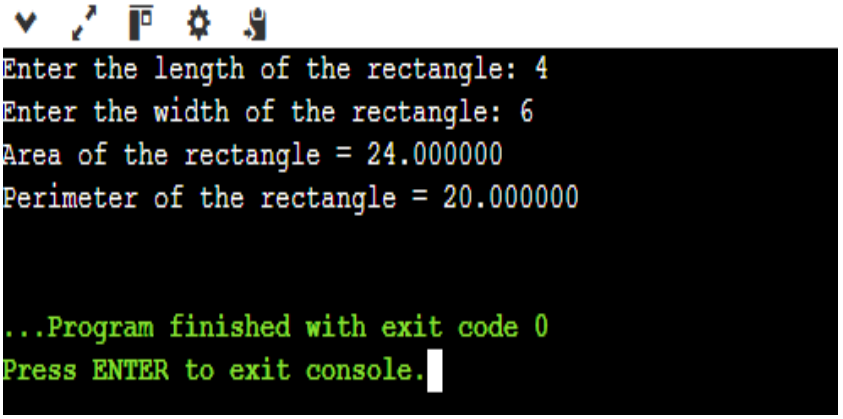
Process: for area is length multiply with width and for perimeter is 2 into length plus width.

Output: area(a): l*w.

perimeter(p): 2*(l+w)

Code:

```
#include <stdio.h>
void main()
{
   float l, w, a, p;
   printf("Enter the length of the rectangle: ");
   scanf("%f", &l);
   printf("Enter the width of the rectangle: ");
   scanf("%f", &w);
   a=l*w;
   p=2*(l+w);
   printf("Area of the rectangle = %f\n", a);
   printf("Perimeter of the rectangle = %f\n", p);
}
```



6. Write a c program to compute the simple interest.

IPO:

Input: variable p,r,t,i here p is principle, t is time, r is rate, i is interest.

Process: p is multiply t multiply r and divide by 100.

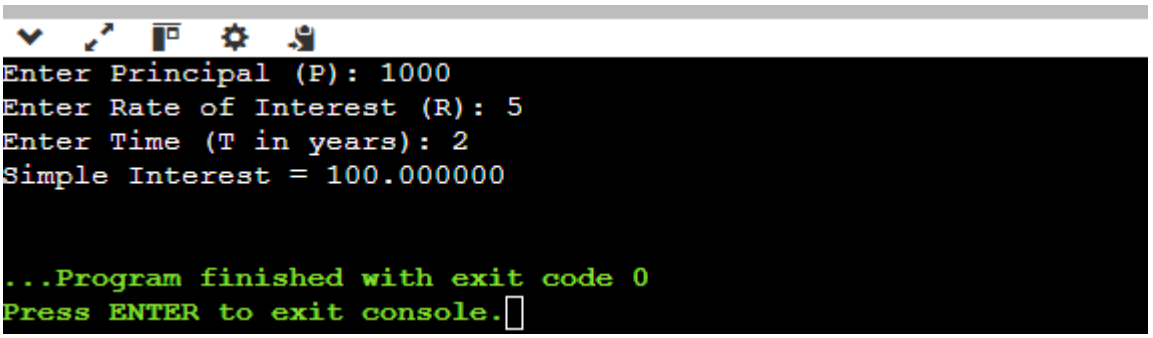
Output: i= p*t*r/100.

Code:

```
#include <stdio.h>

void main()
{
   float p,r,t,i;
   printf("Enter Principal (P): ");
   scanf("%f",&p);
   printf("Enter Rate of Interest (R): ");
   scanf("%f",&r);
   printf("Enter Time (T in years): ");
   scanf("%f",&t);
   i=(p*r*t)/100;
   printf("Simple Interest = %f\n", i);
```

}



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

IPO:

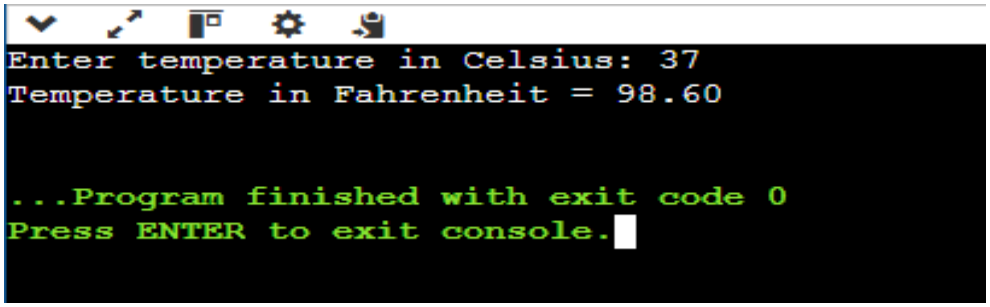
Input: variable c,f c is celsius and f is fahrenheit.

Process= celsius is multiplied with 9/5 and added with 32.

Output: f=(c*9/5)+32.

Code:

```
#include <stdio.h>
void main()
{
   float c,f;
   printf("Enter temperature in Celsius: ");
   scanf("%f", &c);
   f=(c*9/5)+32;
   printf("Temperature in Fahrenheit = %.2f\n",f);
```



}

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

IPO:

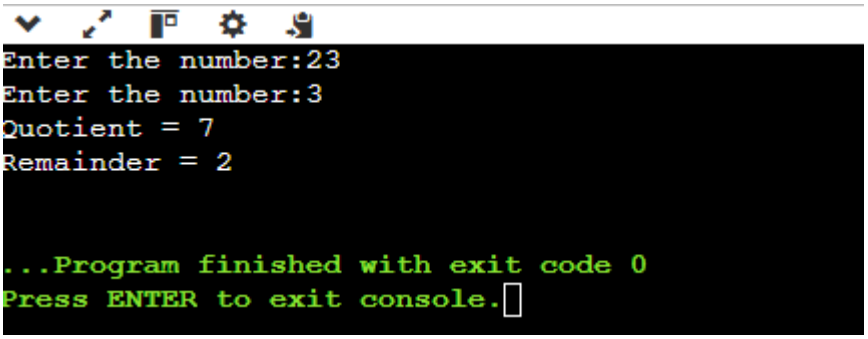
Input: variable a,b. q is quotient, r is remainder.

Process: for quotient a is divided by b. For remainder a modulus b.

Output: q=a/b, r=a%b.

Code:

```
#include <stdio.h>
void main()
{
   int a,b,q,r;
   printf("Enter the number:");
   scanf("%d",&a);
   printf("Enter the number:");
   scanf("%d",&b);
   q=a/b;
   r=a%b;
   printf("Quotient = %d\n",q);
   printf("Remainder = %d\n",r);
}
```



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

IPO:

Input: variable n.

Process: using the if else syntax to check n modulus 2 is equal to 0 or not

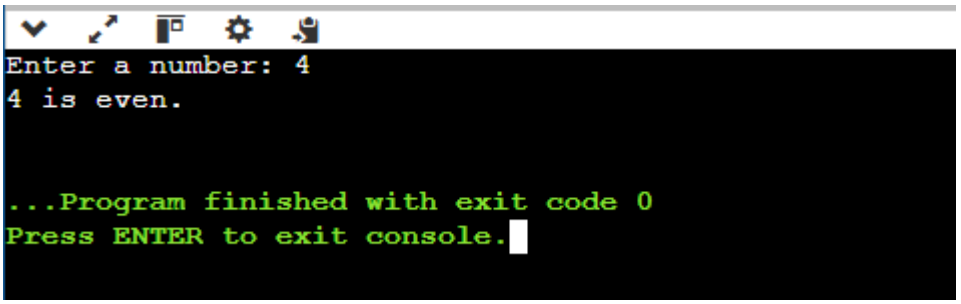
Output: printf whether the given number is odd or even.

Code:

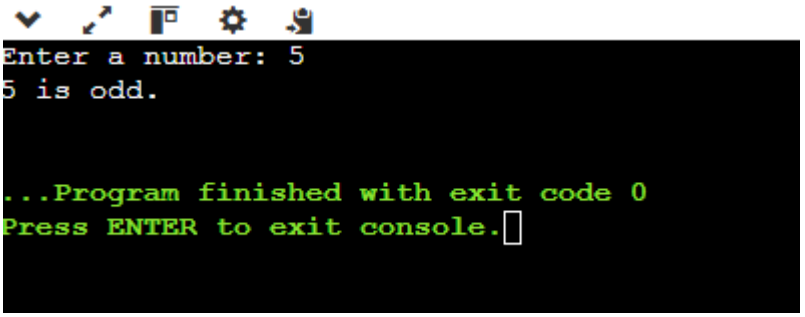
```
#include <stdio.h>
void main()
{
   int n;
   printf("Enter a number: ");
   scanf("%d",&n);
   if (n%2==0)
   {
      printf("%d is even.\n",n);
   }
   else
```

```
    {
        printf("%d is odd.\n",n);
    }
}
```

Output for even number



Output for odd number



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

IPO:

Input: variable i. Cube ,square.

Process: for square is assigned to i multiplied with i

for the cube is assigned with i multiplied i multiplied i.

Output: square= i*i.

cube=i*i*i.

Code:

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

```
void main()
{
   int i,square, cube;
   printf("Enter a number: ");
   scanf("%d",&i);
   square=i*i;
   cube=i*i*i;
   printf("Square of %d = %d\n",i,square);
   printf("Cube of %d = %d\n",i, cube);
}
```