1. Write a C program to add two integers.

   IPO:

   Input: Two integers (a, b)

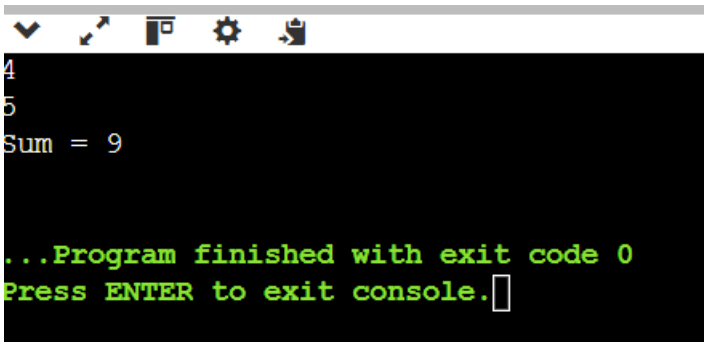
   Process: Add the two integers (sum = a + b)

   Output: Sum of the two integers

   CODE:

```
#include <stdio.h>
void main()
{
   int a, b, sum;
   scanf("%d %d", &a, &b);
   sum = a + b;
   printf("Sum = %d\n", sum);
}
```

   OUTPUT:



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

IPO:

Input: Two integers (a, b)

Process:

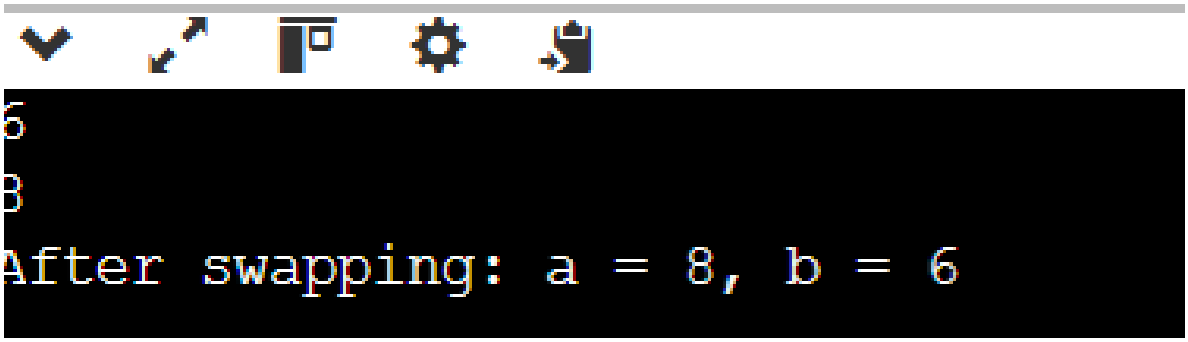
- Store a in temp
- Assign b to a
- Assign temp to b

Output: Swapped values of a and b

CODE:

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

OUTPUT:



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

IPO:

Input: Two integers (a, b)

Process:

- a = a + b
- b = a - b
- a = a - b

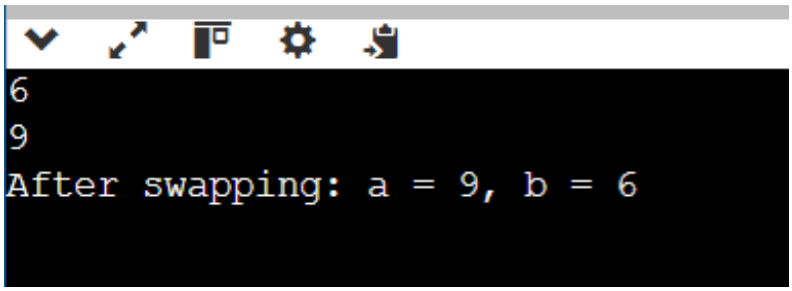
Output: Swapped values of a and b

CODE:

```
#include <stdio.h>
void main()
{
```

```
    int a, b;
    scanf("%d %d", &a, &b);
    a = a + b;
    b = a - b;
    a = a - b;
    printf("After swapping: a = %d, b = %d\n", a, b);
}
```

OUTPUT:



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

IPO:

Input: A character (ch)

Process: Get the ASCII value using implicit casting (int equivalent of ch)

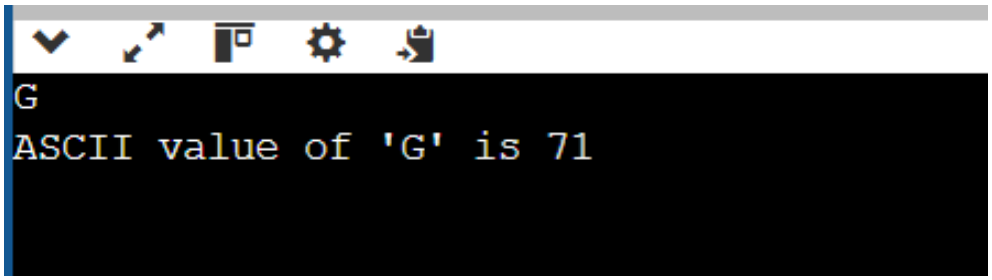
Output: ASCII value of the character

CODE:

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

```
void main()
{
   char ch;
   scanf(" %c", &ch);
   printf("ASCII value of '%c' is %d\n", ch, ch);
   return 0;
}
```

OUTPUT:



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

IPO:

Input: Length and width (float values)

Process:

. area = length × width

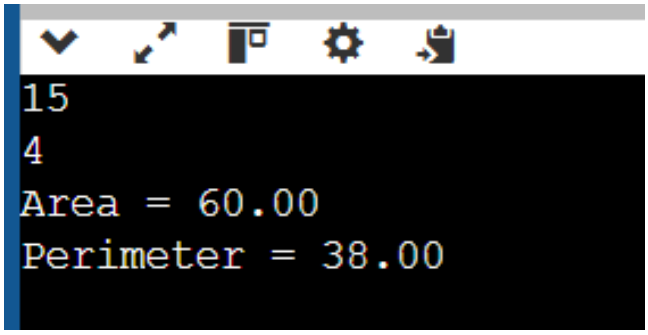
. perimeter = 2 × (length + width)

Output: Area and perimeter of the rectangle

CODE:

```
#include <stdio.h>
void main()
 {
   float length, width, area, perimeter;
   scanf("%f %f", &length, &width);
   area = length * width;
   perimeter = 2 * (length + width);
   printf("Area = %.2f\nPerimeter = %.2f\n", area,
perimeter);
}
```

OUTPUT:



6. Write a program to compute the simple interest.

IPO:

Input: Principal, rate, time (float values)

Process: interest = (principal × rate × time) / 100

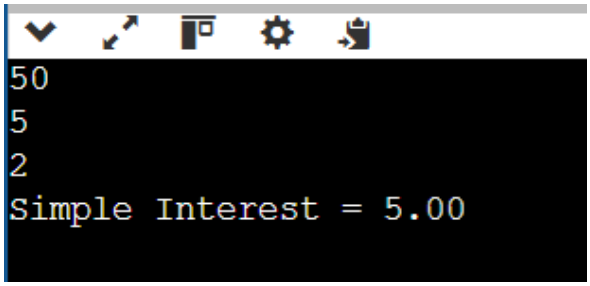
Output: Simple interest

CODE:

```
#include <stdio.h>
void main()
{
   float principal, rate, time, interest;
   scanf("%f %f %f", &principal, &rate, &time);
   interest = (principal * rate * time) / 100;
   printf("Simple Interest = %.2f\n", interest);
```

}

OUTPUT:



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

IPO:

Input: Temperature in Celsius (float)

Process: fahrenheit = (celsius × 9/5) + 32

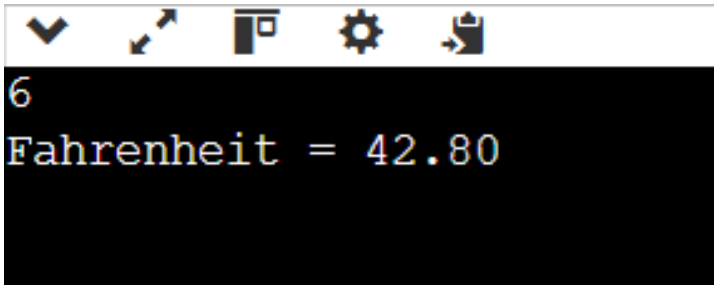
Output: Temperature in Fahrenheit

CODE:

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

```
    printf("Fahrenheit = %.2f\n", fahrenheit);
}
```

OUTPUT:



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

IPO:

Input: Dividend and divisor (integers)

Process:

- quotient = dividend / divisor
- remainder = dividend % divisor

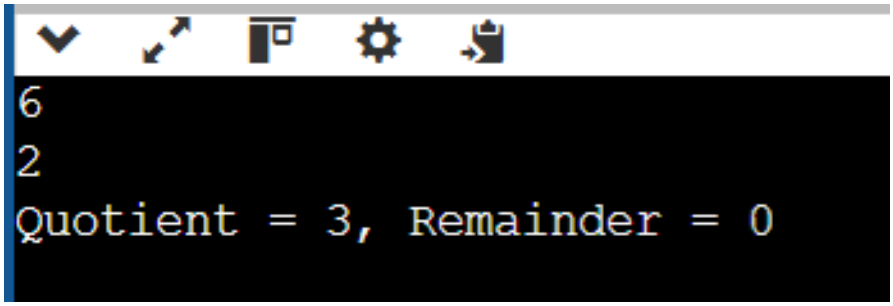
Output: Quotient and remainder

CODE:

```
#include <stdio.h>
void main()
{
```

```
    int dividend, divisor, quotient, remainder;
    scanf("%d %d", &dividend, &divisor);
    quotient = dividend / divisor;
    remainder = dividend % divisor;
    printf("Quotient = %d, Remainder = %d\n", quotient,
remainder);
}
```

OUTPUT:



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

IPO:

Input: Integer number

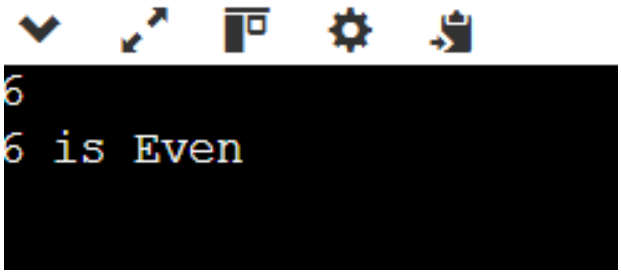
Process: Check if number % 2 == 0 (even) or else (odd)

Output: Message stating whether the number is even or odd

CODE:

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

OUTPUT:



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

IPO:

Input: Integer number

Process:

- square = number × number
- cube = number × number × number

Output: Square and cube of the number

CODE:

```
#include <stdio.h>
void main()
 {
   int num, square, cube;
   scanf("%d", &num);
   square = num * num;
   cube = num * num * num;
   printf("Square = %d\nCube = %d\n", square, cube);
}
```

OUTPUT: