Program 1

```c
#include <stdio.h>
int main() {
    printf("Hello, World!\n");
    return 0;
}
```

Program 2

```c
#include <stdio.h>
int main() {
    int a = 5, b = 3;
    printf("Sum: %d\n", a + b);
    return 0;
}
```

Program 3

```c
#include <stdio.h>
int main() {
    int x = 10, y = 3;
    printf("Difference: %d\n", x - y);
    return 0;
}
```

Program 4

```c
#include <stdio.h>
int main() {
    int a = 4, b = 7;
    printf("Product: %d\n", a * b);
    return 0;
}
```

Program 5

```c
#include <stdio.h>
int main() {
    int dividend = 25, divisor = 5;
    printf("Quotient: %d\n", dividend / divisor);
    return 0;
}
```

Program 6

```c
#include <stdio.h>
int main() {
    int a = 10, b = 3;
    printf("Remainder: %d\n", a % b);
    return 0;
}
```

Program 7

```c
#include <stdio.h>
int main() {
    int x = 5, y = 10;
    printf("Greater: %d\n", x > y);
    return 0;
}
```

Program 8

```c
#include <stdio.h>
int main() {
    int num = 15;
    printf("Not Equal: %d\n", num != 10);
    return 0;
}
```

Program 9

```c
#include <stdio.h>
int main() {
    int flag = 0;
    printf("Logical NOT: %d\n", !flag);
    return 0;
}
```

Program 10

```c
#include <stdio.h>
int main() {
    int p = 1, q = 0;
    printf("Logical AND: %d\n", p && q);
    return 0;
}
```

Program 11

```c
#include <stdio.h>
int main() {
    int a = 1, b = 0;
    printf("Logical OR: %d\n", a || b);
    return 0;
}
```

Program 12

```c
#include <stdio.h>
int main() {
    int x = 5, y = 10;
    printf("Greater or Equal: %d\n", x >= y);
    return 0;
}
```

Program 13

```c
#include <stdio.h>
int main() {
    int a = 3, b = 3;
    printf("Equal: %d\n", a == b);
    return 0;
}
```

Program 14

```c
#include <stdio.h>
int main() {
    int num = 15;
    printf("Bitwise NOT: %d\n", ~num);
    return 0;
}
```

Program 15

```c
#include <stdio.h>
int main() {
    int x = 5, y = 3;
    printf("Bitwise AND: %d\n", x & y);
    return 0;
}
```

Program 16

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

```c
int main() {
    int a = 5, b = 3;
    printf("Bitwise OR: %d\n", a | b);
    return 0;
}
```

Program 17

```c
#include <stdio.h>
int main() {
    int x = 5, y = 3;
    printf("Bitwise XOR: %d\n", x ^ y);
    return 0;
}
```

Program 18

```c
#include <stdio.h>
int main() {
    int num = 10;
    printf("Increment: %d\n", num++);
    return 0;
}
```

Program 19

```c
#include <stdio.h>
int main() {
    int num = 10;
    printf("Decrement: %d\n", num--);
    return 0;
}
```

Program 20

```c
#include <stdio.h>
int main() {
    int x = 5, y = 10;
    printf("Conditional Operator: %d\n", (x > y) ? x : y);
    return 0;
}
```

Program 21

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

```
    int num = 5;
    printf("Sizeof Operator: %lu bytes\n", sizeof(int));
    return 0;
}
```

Program 22

```
#include <stdio.h>
int main() {
    int x = 5, y = 3;
    x += y;
    printf("Compound Assignment: %d\n", x);
    return 0;
}
```

Program 23

```
#include <stdio.h>
int main() {
    int a = 5, b = 3;
    a *= b;
    printf("Compound Assignment: %d\n", a);
    return 0;
}
```

Program 24

```
#include <stdio.h>
int main() {
    int x = 8;
    printf("Shift Left: %d\n", x << 2);
    return 0;
}
```

Program 25

```
#include <stdio.h>
int main() {
    int num = 17;
    printf("Remainder: %d\n", num % 5);
    return 0;
}
```

Program 26

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

```c
int main() {
    int a = 6, b = 3;
    printf("Bitwise XOR: %d\n", a ^ b);
    return 0;
}
```

Program 27

```c
#include <stdio.h>
int main() {
    int x = 7;
    x <<= 2;
    printf("Left Shift: %d\n", x);
    return 0;
}
```

Program 28

```c
#include <stdio.h>
int main() {
    int condition = 1;
    int value = (condition) ? 5 : 10;
    printf("Conditional Assignment: %d\n", value);
    return 0;
}
```

Program 29

```c
#include <stdio.h>
int main() {
    int num = 8;
    printf("Unary Minus: %d\n", -num);
    return 0;
}
```

Program 30

```c
#include <stdio.h>
int main() {
    int x = 5;
    printf("Post-increment: %d\n", x++);
    printf("Updated value: %d\n", x);
    return 0;
}
```

Program 31

```c
#include <stdio.h>
int main() {
    int x = 5, y = 3;
    printf("Bitwise Right Shift: %d\n", x >> 1);
    return 0;
}
```

Program 32

```c
#include <stdio.h>
int main() {
    int a = 5, b = 3;
    printf("Bitwise Left Shift: %d\n", a << 2);
    return 0;
}
```

Program 33

```c
#include <stdio.h>
int main() {
    int a = 12, b = 3;
    printf("Bitwise Right Shift with Sign Extension: %d\n", a >> 2);
    return 0;
}
```

Program 34

```c
#include <stdio.h>
int main() {
    int num = 10;
    printf("Pre-increment: %d\n", ++num);
    printf("Updated value: %d\n", num);
    return 0;
}
```

Program 35

```c
#include <stdio.h>
int main() {
    int x = 5, y = 3;
    printf("Bitwise NOT for y: %d\n", ~y);
    return 0;
}
```

Program 36

```c
#include <stdio.h>
int main() {
    int a = 5, b = 3;
    printf("Bitwise XOR with Self: %d\n", a ^ a);
    return 0;
}
```

Program 37

```c
#include <stdio.h>
int main() {
    int x = 5, y = 3;
    printf("Bitwise AND with Self: %d\n", x & x);
    return 0;
}
```

Program 38

```c
#include <stdio.h>
int main() {
    int a = 5, b = 3;
    printf("Bitwise OR with Self: %d\n", a | a);
    return 0;
}
```

Program 39

```c
#include <stdio.h>
int main() {
    int num = 10;
    printf("Bitwise XOR with 0: %d\n", num ^ 0);
    return 0;
}
```

Program 40

```c
#include <stdio.h>
int main() {
    int x = 5, y = 3;
    printf("Bitwise AND with 0: %d\n", x & 0);
    return 0;
}
```

Program 41

```c
#include <stdio.h>
int main() {
    int a = 10, b = 3;
    printf("Bitwise OR with 0: %d\n", a | 0);
    return 0;
}
```

Program 42

```c
#include <stdio.h>
int main() {
    int num = 7;
    printf("Size of char: %lu bytes\n", sizeof(char));
    return 0;
}
```

Program 43

```c
#include <stdio.h>
int main() {
    int x = 5, y = 3;
    printf("Bitwise Left Shift with Self: %d\n", x << x);
    return 0;
}
```

Program 44

```c
#include <stdio.h>
int main() {
    int a = 5, b = 3;
    printf("Bitwise Right Shift with Self: %d\n", a >> a);
    return 0;
}
```

Program 45

```c
#include <stdio.h>
int main() {
    int x = 5, y = 3;
    printf("Bitwise XOR with 1: %d\n", x ^ 1);
    return 0;
}
```

Program 46

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

```c
int main() {
    int a = 5, b = 3;
    printf("Bitwise AND with 1: %d\n", a & 1);
    return 0;
}
```

Program 47

```c
#include <stdio.h>
int main() {
    int num = 15;
    printf("Bitwise NOT with 0: %d\n", ~0);
    return 0;
}
```

Program 48

```c
#include <stdio.h>
int main() {
    int x = 10, y = 3;
    printf("Bitwise XOR with 0: %d\n", x ^ 0);
    return 0;
}
```

Program 49

```c
#include <stdio.h>
int main() {
    int num = 7;
    printf("Size of float: %lu bytes\n", sizeof(float));
    return 0;
}
```

Program 50

```c
#include <stdio.h>
int main() {
    int x = 5, y = 3;
    printf("Bitwise AND with -1: %d\n", x & -1);
    return 0;
}
```

Program 51

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

```
    int a = 5, b = 3;
    printf("Bitwise OR with -1: %d\n", a | -1);
    return 0;
}
```

Program 52

```
#include <stdio.h>
int main() {
    int num = 7;
    printf("Size of double: %lu bytes\n", sizeof(double));
    return 0;
}
```

Program 53

```
#include <stdio.h>
int main() {
    int x = 5, y = 3;
    printf("Bitwise Left Shift with 0: %d\n", x << 0);
    return 0;
}
```

Program 54

```
#include <stdio.h>
int main() {
    int a = 5, b = 3;
    printf("Bitwise Right Shift with 0: %d\n", a >> 0);
    return 0;
}
```

Program 55

```
#include <stdio.h>
int main() {
    int x = 5, y = 3;
    printf("Bitwise XOR with -1: %d\n", x ^ -1);
    return 0;
}
```

Program 56

```
#include <stdio.h>
int main() {
    int num = 7;
```

```
    printf("Size of long: %lu bytes\n", sizeof(long));
    return 0;
}
```

Program 57

```
#include <stdio.h>
int main() {
    int x = 5, y = 3;
    printf("Bitwise AND with 0xFF: %d\n", x & 0xFF);
    return 0;
}
```

Program 58

```
#include <stdio.h>
int main() {
    int a = 5, b = 3;
    printf("Bitwise OR with 0xFF: %d\n", a | 0xFF);
    return 0;
}
```

Program 59

```
#include <stdio.h>
int main() {
    int num = 7;
    printf("Size of long long: %lu bytes\n", sizeof(long long));
    return 0;
}
```

Program 60

```
#include <stdio.h>
int main() {
    int x = 5, y = 3;
    printf("Bitwise XOR with 0xFF: %d\n", x ^ 0xFF);
    return 0;
}
```

Program 61

```
#include <stdio.h>
int main() {
    int num1 = 5, num2 = 10;
    printf("Largest number: %d\n", (num1 > num2) ? num1 : num2);
```

```
    return 0;
}
```

Program 62

```
#include <stdio.h>
int main() {
    int num1 = 5, num2 = 10;
    printf("Smallest number: %d\n", (num1 < num2) ? num1 : num2);
    return 0;
}
```

Program 63

```
#include <stdio.h>
int main() {
    int x = 5, y = 3;
    printf("Bitwise Left Shift with 1: %d\n", x << 1);
    return 0;
}
```

Program 64

```
#include <stdio.h>
int main() {
    int a = 5, b = 3;
    printf("Bitwise Right Shift with 1: %d\n", a >> 1);
    return 0;
}
```

Program 65

```
#include <stdio.h>
int main() {
    int num = 7;
    printf("Size of short: %lu bytes\n", sizeof(short));
    return 0;
}
```

Program 66

```
#include <stdio.h>
int main() {
    int x = 5, y = 3;
    printf("Bitwise XOR with 1: %d\n", x ^ 1);
    return 0;
```

```
}
```

Program 67

```
#include <stdio.h>
int main() {
    int num1 = 5, num2 = 10;
    printf("Max of two numbers: %d\n", (num1 > num2) ? num1 : num2);
    return 0;
}
```

Program 68

```
#include <stdio.h>
int main() {
    int num1 = 5, num2 = 10;
    printf("Min of two numbers: %d\n", (num1 < num2) ? num1 : num2);
    return 0;
}
```

Program 69

```
#include <stdio.h>
int main() {
    int x = 5, y = 3;
    printf("Bitwise AND with 0xFFFF: %d\n", x & 0xFFFF);
    return 0;
}
```

Program 70

```
#include <stdio.h>
int main() {
    int a = 5, b = 3;
    printf("Bitwise OR with 0xFFFF: %d\n", a | 0xFFFF);
    return 0;
}
```

Program 71

```
#include <stdio.h>
int main() {
    int x = 5, y = 3;
    printf("Bitwise XOR with 0xFFFF: %d\n", x ^ 0xFFFF);
    return 0;
```

```
}
```

Program 72

```
#include <stdio.h>
int main() {
    int a = 5, b = 3;
    printf("Bitwise NOT with 0xFFFF: %d\n", ~0xFFFF);
    return 0;
}
```

Program 73

```
#include <stdio.h>
int main() {
    int num = 7;
    printf("Size of unsigned int: %lu bytes\n", sizeof(unsigned int));
    return 0;
}
```

Program 74

```
#include <stdio.h>
int main() {
    int x = 5, y = 3;
    printf("Bitwise AND with 0x0F: %d\n", x & 0x0F);
    return 0;
}
```

Program 75

```
#include <stdio.h>
int main() {
    int a = 5, b = 3;
    printf("Bitwise OR with 0x0F: %d\n", a | 0x0F);
    return 0;
}
```

Program 76

```
#include <stdio.h>
int main() {
    int x = 5, y = 3;
    printf("Bitwise XOR with 0x0F: %d\n", x ^ 0x0F);
    return 0;
}
```

Program 77

```c
#include <stdio.h>
int main() {
    int num = 7;
    printf("Size of unsigned char: %lu bytes\n", sizeof(unsigned char));
    return 0;
}
```

Program 78

```c
#include <stdio.h>
int main() {
    int x = 5, y = 3;
    printf("Bitwise NOT with 0x0F: %d\n", ~0x0F);
    return 0;
}
```

Program 79

```c
#include <stdio.h>
int main() {
    int a = 5, b = 3;
    printf("Bitwise AND with 0xFF: %d\n", a & 0xFF);
    return 0;
}
```

Program 80

```c
#include <stdio.h>
int main() {
    int x = 5, y = 3;
    printf("Bitwise OR with 0xFF: %d\n", x | 0xFF);
    return 0;
}
```

Program 81

```c
#include <stdio.h>
int main() {
    int num = 7;
    printf("Size of unsigned short: %lu bytes\n", sizeof(unsigned short));
    return 0;
}
```

Program 82

```c
#include <stdio.h>
int main() {
    int x = 5, y = 3;
    printf("Bitwise XOR with 0xFF: %d\n", x ^ 0xFF);
    return 0;
}
```

Program 83

```c
#include <stdio.h>
int main() {
    int num1 = 5, num2 = 10;
    printf("Absolute difference: %d\n", (num1 > num2) ? num1 - num2 : num2
- num1);
    return 0;
}
```

Program 84

```c
#include <stdio.h>
int main() {
    int num1 = 5, num2 = 10;
    printf("Bitwise OR with 0x00: %d\n", num1 | 0x00);
    return 0;
}
```

Program 85

```c
#include <stdio.h>
int main() {
    int x = 5, y = 3;
    printf("Bitwise AND with 0x00: %d\n", x & 0x00);
    return 0;
}
```

Program 86

```c
#include <stdio.h>
int main() {
    int num1 = 5, num2 = 10;
    printf("Bitwise XOR with 0x00: %d\n", num1 ^ 0x00);
    return 0;
}
```

Program 87

```c
#include <stdio.h>
int main() {
    int x = 5, y = 3;
    printf("Bitwise OR with -1: %d\n", x | -1);
    return 0;
}
```

Program 88

```c
#include <stdio.h>
int main() {
    int a = 5, b = 3;
    printf("Bitwise AND with -1: %d\n", a & -1);
    return 0;
}
```

Program 89

```c
#include <stdio.h>
int main() {
    int num = 7;
    printf("Size of unsigned long: %lu bytes\n", sizeof(unsigned long));
    return 0;
}
```

Program 90

```c
#include <stdio.h>
int main() {
    int x = 5, y = 3;
    printf("Bitwise XOR with -1: %d\n", x ^ -1);
    return 0;
}
```

Program 91

```c
#include <stdio.h>
int main() {
    int num1 = 5, num2 = 10;
    printf("Bitwise OR with -128: %d\n", num1 | -128);
    return 0;
}
```

Program 92

```c
#include <stdio.h>
int main() {
    int x = 5, y = 3;
    printf("Bitwise AND with -128: %d\n", x & -128);
    return 0;
}
```

Program 93

```c
#include <stdio.h>
int main() {
    int num1 = 5, num2 = 10;
    printf("Bitwise XOR with -128: %d\n", num1 ^ -128);
    return 0;
}
```

Program 94

```c
#include <stdio.h>
int main() {
    int x = 5, y = 3;
    printf("Bitwise OR with 127: %d\n", x | 127);
    return 0;
}
```

Program 95

```c
#include <stdio.h>
int main() {
    int a = 5, b = 3;
    printf("Bitwise AND with 127: %d\n", a & 127);
    return 0;
}
```

Program 96

```c
#include <stdio.h>
int main() {
    int num = 7;
    printf("Size of unsigned long long: %lu bytes\n", sizeof(unsigned long
long));
    return 0;
}
```

Program 97

```c
#include <stdio.h>
int main() {
    int x = 5, y = 3;
    printf("Bitwise XOR with 127: %d\n", x ^ 127);
    return 0;
}
```

Program 98

```c
#include <stdio.h>
int main() {
    int num1 = 5, num2 = 10;
    printf("Bitwise OR with 255: %d\n", num1 | 255);
    return 0;
}
```

Program 99

```c
#include <stdio.h>
int main() {
    int x = 5, y = 3;
    printf("Bitwise AND with 255: %d\n", x & 255);
    return 0;
}
```

Program 100

```c
#include <stdio.h>
int main() {
    int num = 7;
    printf("Size of pointer: %lu bytes\n", sizeof(void*));
    return 0;
}
```

##############################Happy Learning ##################################