

Exercises

1. Given $x = 1$ and $y = 3$, write a program to print out the results of these expressions: $x += y$, $x += -y$, $x -= y$, $x -= -y$, $x *= y$, and $x *= -y$.

2. Given $x = 3$ and $y = 6$, what is the value of z after the statement $z = x * y == 18$; is executed?

3. Write a program that initializes the integer variable x with 1 and outputs results with the following two statements:
`printf("x++ produces: %d\n", x++);`
`printf("Now x contains: %d\n", x);`

4. Rewrite the program you wrote in exercise 3. This time, include the following two statements:
`printf("x = x++ produces: %d\n", x = x++);`
`printf("Now x contains: %d\n", x);`
What do you get after running the executable of the program? Can you explain why you get such a result?

5. The following program is supposed to compare the two variables, x and y , for equality. What's wrong with the program? (Hint: Run the program to see what it prints out.)

```
#include <stdio.h>
main()
{
    int x, y;
    x = y = 0;
    printf("The comparison result is: %d\n", x = y);
    return 0;
}
```