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## 1.
```cpp
if (x < 0) {
    x = 7;
    cout <<"x is now positive";
} else {
    x = -7;
    cout << "x is now negative";
}
```

## 2. Self Test Exercise

## 3.
```cpp
#include <iostream>
using namespace std;

int main() {

    const float number_of_liters_in_a_gallon = 3.78533;
    float number_of_gallons;

    cout << "Please enter the number of gallons: \n";
    cin >> number_of_gallons;
    number_of_gallons = number_of_liters_in_a_gallon * number_of_gallons;

    cout << "The equivalent number of liters is: " << number_of_gallons;

    return 0;
}
```

4. 10
   7
   4
   1

5. There will be no output because x is not less than 0.

6. 10
   7

4
1

7. -42

8. A while loop is a control flow statement that allows code to be executed reportedly on a given Boolean condition. A do-while loop is similar to while loop with the only difference that it checks for the condition after executing the statements.

9. The program will be an infinite loop output a number starting from 10 then 13, 16, 19 etc...

10.
```cpp
#include <iostream>
using namespace std;

int main() {

  int number = 1;

  while (number < 10) {
    cout << number << "\n";
    number++;
  }

  return 0;
}
```