

For/While/DoWhile Loop

C++

```

1  #include <iostream>
2  using namespace std;
3  int overtime(int pay, int hour){
4      int extraTime = hour - 40;
5      float extraPay = pay * extraTime * 2;
6      return extraPay;
7  }
8  int main(){
9      int unit, hour;
10     float pay, totalPay, finalPay;
11     float extraTime = 0, extraPay = 0;
12     for(unit = 1; unit < 4; unit++){
13         cout << "-----\nWorker #" << unit
14         << "\n";
15         cout << "Enter this worker's hourly pay. $";
16         cin >> pay;
17         cout << "For how long has he/she worked? (In hours) ";
18         cin >> hour;
19         if(hour > 40){
20             extraTime = hour - 40;
21             extraPay = overtime(pay, hour);
22         }
23         totalPay = (pay * hour) + extraPay;
24         finalPay = totalPay / 1.07;
25         cout << "-----\n";
26         cout << "Total hours worked: " << hour << " (" << extraTime << " overtime)\n";
27         cout << "Gross pay: $" << totalPay << "\n";
28         cout << "Payroll tax: $" << (totalPay * 0.07) << "\n";
29         cout << "-----\n";
30         cout << "Final pay: $" << finalPay << "\n";
31     }
}

```

Worker #1

Enter this worker's hourly pay. \$7.50

For how long has he/she worked? (In hours) 31

Total hours worked: 31 (0 overtime)

Gross pay: \$232.5

Payroll tax: \$16.275

Final pay: \$217.29

Worker #2

Enter this worker's hourly pay. \$4.15

For how long has he/she worked? (In hours) 53

Total hours worked: 53 (13 overtime)

Gross pay: \$323.95

Payroll tax: \$22.6765

Final pay: \$302.757

Worker #3

Enter this worker's hourly pay. \$9.45

For how long has he/she worked? (In hours) 27

Total hours worked: 27 (13 overtime)

Gross pay: \$359.15

Payroll tax: \$25.1405

Final pay: \$335.654

C#

```
1 using System;
2 namespace workerWage{
3     | 0 references
4     | public class WorkerWage{
5     |     | 0 references
6     |     | static void Main(string[] args){
7     |     |     int unit = 0, hour, extraTime = 0;
8     |     |     float pay, totalPay, finalPay, extraPay = 0;
9     |     |     while(unit < 3){
10    |     |         unit++;
11    |     |         Console.WriteLine
12    |     |         ("-----\nWorker #" + unit
13    |     |         + "\nEnter this worker's hourly pay. (In $)");
14    |     |         pay = float.Parse(Console.ReadLine());
15    |     |         Console.WriteLine("For how long has he/she worked? (In hours)");
16    |     |         hour = int.Parse(Console.ReadLine());
17    |     |         if(hour > 40){
18    |     |             extraTime = hour - 40;
19    |     |             extraPay = pay * extraTime * 2;
20    |     |         }
21    |     |         totalPay = (pay * hour) + extraPay;
22    |     |         finalPay = totalPay / (float)1.07;
23    |     |         Console.WriteLine
24    |     |         ("-----");
25    |     |         Console.WriteLine("Total hours worked: " + hour + " (" + extraTime + " overtime");
26    |     |         Console.WriteLine("Gross pay: $" + totalPay);
27    |     |         Console.WriteLine("Payroll tax: $" + (totalPay * 0.07));
28    |     |         Console.WriteLine
29    |     |         ("-----");
30    |     |         Console.WriteLine("Final pay: $" + finalPay);
31    |     |     }
32    |     }
33 }
```

Worker #1
Enter this worker's hourly pay. (In \$)
6.35
For how long has he/she worked? (In hours)
31

Total hours worked: 31 (0 overtime)
Gross pay: \$196.84999
Payroll tax: \$13.779499359130861

Final pay: \$183.97194

Worker #2
Enter this worker's hourly pay. (In \$)
3.95
For how long has he/she worked? (In hours)
54

Total hours worked: 54 (14 overtime)
Gross pay: \$323.9
Payroll tax: \$22.67299957275391

Final pay: \$302.71027

Worker #3
Enter this worker's hourly pay. (In \$)
8.55
For how long has he/she worked? (In hours)
17

Total hours worked: 17 (14 overtime)
Gross pay: \$255.95001
Payroll tax: \$17.916500854492188

Final pay: \$239.20561

Java

```
1  import java.util.Scanner;
2  public class App {
3      public static void main(String[] args) throws Exception {
4          Scanner sc = new Scanner(System.in);
5          int unit = 0, hour, extraTime = 0;
6          float pay, totalPay, finalPay, extraPay = 0;
7          do{
8              unit++;
9              System.out.println
10              ("-----\nWorker #" + unit +
11              "\nEnter this worker's hourly pay. (In $)");
12              pay = sc.nextFloat();
13              System.out.println(x:"For how long has he/she worked? (In hours)");
14              hour = sc.nextInt();
15              if(hour > 40){
16                  extraTime = hour - 40;
17                  extraPay = pay * extraTime * 2;
18              }
19              totalPay = (pay * hour) + extraPay;
20              finalPay = totalPay / (float)1.07;
21              System.out.println(x:"-----");
22              System.out.println("Total hours worked: " + hour + " (" + extraTime + " overtime)");
23              System.out.println("Gross pay: $" + totalPay);
24              System.out.println("Payroll tax: $" + (totalPay * 0.07));
25              System.out.println(x:"-----");
26              System.out.println("Final pay: $" + finalPay);
27          }while(unit < 3);
28      }
29  }
```

Worker #1
Enter this worker's hourly pay. (In \$)
7.25
For how long has he/she worked? (In hours)
26

Total hours worked: 26 (0 overtime)
Gross pay: \$188.5
Payroll tax: \$13.19500000000002

Final pay: \$176.16821

Worker #2
Enter this worker's hourly pay. (In \$)
4.30
For how long has he/she worked? (In hours)
42

Total hours worked: 42 (2 overtime)
Gross pay: \$197.8
Payroll tax: \$13.84600213623048

Final pay: \$184.8598

Worker #3
Enter this worker's hourly pay. (In \$)
8.55
For how long has he/she worked? (In hours)
17

Total hours worked: 17 (2 overtime)
Gross pay: \$162.55
Payroll tax: \$11.378500213623047

Final pay: \$151.91588
