

8/5/2021

CS305 Object Oriented and Functional Programming in JavaScript

Assignment

W1D1 Selection and Repetition in JavaScript

First do the readings and complete the following tasks from The JavaScript Language book. Try to complete the answers before looking at the solutions.

Implement the coding assignments in VSCode.

JavaScript Fundamentals chapter

Variables

- Giving the right name
- Uppercase const

Basic operators, maths

- The postfix and prefix forms
- Assignment result
- Type conversions
- Fix the addition

Comparisons

- Comparisons

Logical operators

- Do all 9 Tasks in this section

Loops: while and for

- Do all 7 Tasks in this section

Programming homeworks

1. Write a program to compute sales commission based on following rules:
 - If the salesman is salaried then
 - There is no commission for sales below \$300
 - 1% for sales between \$300 and \$500 (exclusive)
 - 2% for sales above \$500
 - If the salesman is not salaried then
 - 2% for sales between \$300 and \$500 (exclusive)

- 3% for sales above \$500
2. Write a loop that continually prompts for age until you enter age older than 18
 - Write both while and do while versions.
 3. Make a defining table and program to print out the balance of a savings account that compounds interest monthly. Prompt the user for the
 - initial amount
 - annual interest rate
 - number of years to compound
 4. Write code to print the number patterns on the console

```
12345
12345
12345
12345
12345
```

```
1
22
333
4444
55555

55555
4444
333
22
1
```

5. Cost of House Down Payment

Make a defining table and then write a program that calculates down payment for a home loan based on following rules. Your program should prompt for the cost and write the down payment amount to the console.

Cost of House	Down Payment
\$0 to less than 50K	5% of the cost
\$50K to less than 100K	\$1000 + 10% of (cost - \$50K)
\$100K to less than 200K	\$2000 + 15% of (cost - \$100K)
\$200K and above	\$5000 + 10% of (cost - \$200K)

6. Write a JavaScript program to prompt for an integer and compute the sum of all the digits.

Input	Output
123	6
102	3
8	8