

2/11/2021

### W1D3 Selection Assignment

1. Write a program that helps a user choose the correct footwear for the day's weather based on the table shown below. If the user enters any other weather type, your program should output "sneakers"

Weather	Footwear
hot	sandals
rain	galoshes
snow	boots

2. Write a program that reads from the keyboard a student's name and number of completed credits and then outputs the student's name and label on following rules:
  - a. "Freshman" if  $0 < \text{credits} < 30$
  - b. "Sophomore" if  $30 \leq \text{credits} < 60$
  - c. "Junior" if  $60 \leq \text{credits} < 90$
  - d. "Senior" if  $\text{credits} > 90$

3. Write a program that calculates down payment for a home loan based on following rules.

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)

4. A university library that loans book to students, faculty, and the public has a written policy that determines how long someone may borrow a book before it is due, which is shown on the table below. Write a defining table and JavaScript program that determines how long a person may borrow a book.

Status	Number of books Overdue	Loan duration in weeks
Student	0	6
	fewer than 3	4
	3 or more	2
Faculty	0	12
	fewer than 3	10
	3 or more	8
Other	0	4
	fewer than 3	3
	3 or more	2

5. Write a defining table and then a program that determines what time a child should go to bed. Your program must read a child's age and the season (winter, spring, summer, or fall) from the keyboard and output the child's bedtime according to this table:

Age	Season	Bed Time
5 or younger	summer, fall	8:30 PM
	winter, spring	8:00 PM
6 to 12	summer	9:30 PM
	winter, spring, fall	8:30 PM
13 and older	summer	10:30 PM
	winter, spring, fall	9:30 PM

From Reading

1. What happens when you forget a break while using switch statement?
2. What will be the output of running following code?

```
var foo = 0;
switch (foo) {
  case -1:
    console.log('negative 1');
    break;
  case 0:
    console.log(0);
  case 1:
    console.log(1);
    break;
  case 2:
    console.log(2);
    break;
  default:
    console.log('default');
}
```

3. Will output change if value of foo is a '0' (0 in quotes) instead?