## ECE 152 Programming for Engineers Laboratory 2

## NOTE:

- Please submit only C++ source files (\*.cpp) to Blackboard.
- Please put your name, project description, and date on the top of your file as a comment.
- PLEASE WORK ALONE. If cheating is found, you will get ZERO.
- 1. (Lastname\_Lab2\_p1.cpp) Write a program to compute and display a person's weekly salary as determined by the following expressions: If the number of hours worked is less than or equal to 40, the person receives \$8 per hour; otherwise, the person receives \$320, plus \$12 for each hour worked over 40 hours. The program should request the hours worked as input and should display the salary as output.
- **2.** (Lastname\_Lab2\_p2.cpp) Write a program to display the following two prompts:

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Enter a month: (use a 1 for Jan, etc.)
Enter a day of the month:
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Have your program accept and store a number in the variable month in response to the first prompt and, in response to the second prompt, accept and store a number in the variable day. If the month entered is not between 1 and 12, inclusive, print a message informing the user that an invalid month has been entered. If the day entered is not between 1 and 31, print a message informing the user that an invalid day has been entered.

**3.** (Lastname\_Lab2\_p3.cpp) The interest rate paid on funds deposited in a bank is determined by the amount of time the money is left on deposit. For a particular bank, the following schedule is used:

Time on Deposit	<b>Interested Rate</b>
Grater than or equal to 5 years	4.5 percent
Less than 5 years but greater than or equal to 4 years	4.0 percent
Less than 4 years but greater than or equal to 3 years	3.5 percent
Less than 3 years but greater than or equal to 2 years	2.5 percent
Less than 2 years but greater than or equal to 1 year	2.0 percent
Less than 1 year	1.5 percent

Write a program that accepts the time that funds are left on deposit and displays the interest rate that corresponds to the time entered.

**4.** (Lastname\_Lab2\_p4.cpp) Each disk drive in a shipment is stamped with a code from 1 to 4, where the codes indicate the following disk manufactures:

Code	Manufacturer
1	3M Corporation
2	West Digital Corporation
3	Seagate Corporation
4	Verbatim Corporation

Write a program that accepts the code number as an input and, on the basis of the value entered, displays the correct disk drive manufacturer. (Hint: use switch)