Lab 4 PRG155

## Conditional Statements in C Friday October 14, 2016 at 11.59 pm

1. Ask the user to enter a number. If the value is greater than zero, multiply the number by three. Then print "Three times you number \_\_\_\_ is \_\_\_\_". Use separate lines for the calculation and the print statement.

If the number is less than zero, multiply the number by minus 1. Then print "The absolute value of your number is " and print the value of the number multiplied by minus one. Use separate lines for the multiply and the print statements.

If the number is equal to zero, print "Your number is zero".

2. Ask the user to enter two integers. If both numbers are greater than 100 multiply the two numbers together and print the result and "Both numbers are greater than 100".

Else print "At least one of the numbers is less than 100").

- 3. Ask the user to enter a character. Check to see if the character is an A or B. If it is an A or a B print "That's an A or B", else print "Not an A or B". Then print "Goodbye" in both cases, but only use one print statement in the program to print "Goodbye".
- 4. Body Mass Index (BMI) is a measure of health on weight. It can be calculated by taking your weight in kilograms and dividing by the square of your height in meters. The interpretation of BMI for people 16 years or older is as follows:

BMI	Interpretation
below 16	seriously underweight
16–18	underweight
18-24	normal weight
24-29	overweight
29-35	seriously overweight
above 35	gravely overweight

Write a program that prompts the user to enter a weight in pounds and height in inches and display the BMI value as well as the interpretation of that value.

Note: one pound is 0.453 kilograms and one inch is 0.0254 meters

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5. Write a program that prompts the user to enter an integer and checks whether the number is divisible by both 5 and 6, or neither of them, or just one of them. Here are some sample runs for inputs 10,30, and 23.

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10 is divisible by 5 or 6, but not both 30 is divisible by both 5 and 6 23 is not divisible by either 5 or 6
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