

# Programming Logic - Beginning

152-101

## Unit 5 – Belts Program

20 points
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The following exercises give you additional practice working with Radio Button and Check Box controls and decision control structures. You can use the supplied skeleton projects (Belts) or create your own. No welcome screen is required for this assignment.

### Belt's Ice Cream Stand

The customers at Belt's would like a program to estimate the cost of their sundae order while standing in line.

Belt's has 4 flavors of sundaes. You can only select one type of sundae. The costs are: Hot Fudge: \$0.85, Strawberry: \$1.05, Butterscotch: \$.70, Caramel: \$.80

The sundaes come in 3 sizes: Small: \$1.00, Medium: \$1.45, Large: \$1.90.

The sundaes have a few toppings that can be added but you do not have to have any toppings. You can add any combination of toppings. The toppings are: nuts, extra syrup and bananas. The cost is: for one topping, \$.50. For 2 or more toppings, they cost \$.40 each.

You can order multiple sundaes, but they all must be of the same flavor/size/toppings.

Belt's is running a special this week: if you order a large strawberry sundae, you get 20% off your entire order.

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Develop flowcharts and pseudocode for all procedures.

Display the cost for one sundae (no add-ons) and the add-on cost for one sundae. Then display the total cost overall for all sundaes ordered. Format your output appropriately. You must use switch and If statements appropriately.

In an output label, develop a message that identifies the number, sundae flavor and size the person ordered. (Example: You ordered 2 small hot fudge sundaes which will cost you \$x.xx (where x.xx is the cost for all sundaes ordered)). Note the capitalization. **You do not need to include this in your design—it is for demonstration purposes only.**

**Extra Credit (1 point):** Include the selected toppings in the message.

When the application loads, establish defaults for each group of radio buttons. Follow proper naming conventions for all controls. Establish appropriate focus on fields.

Follow the class [programming standards](#), incorporating all standards except those designated for Unit 6 or Programming Logic - Intermediate.