Engel Coefficient

*Engel coefficient* is an observation in economics stating that as income rises, the proportion of income spent on food falls, even if actual expenditure on food rises. In other words, the income elasticity of demand of food is between 0 and 1.

$Engel \ coefficient = \frac{expenditure \ on \ food}{total \ income}$

Engel coefficient shows living standards as follows (simplified):

- above 60% represents poverty;
- 45%–60% indicates barely meeting daily needs;
- 30%–45% shows a well-to-do standard of living;
- below 30% represents a wealthy life.

Write a complete C++ program asking the user how much money is spent on food and the total income per week, then showing his/her living standard classification. You can design your own user-friendly prompts and outputs.

Example:

Please input how much money you spend on food (per week): $200

What is your total income (per week): $500

Your Engel coefficient is 40%.
You have a well-to-do standard of living.