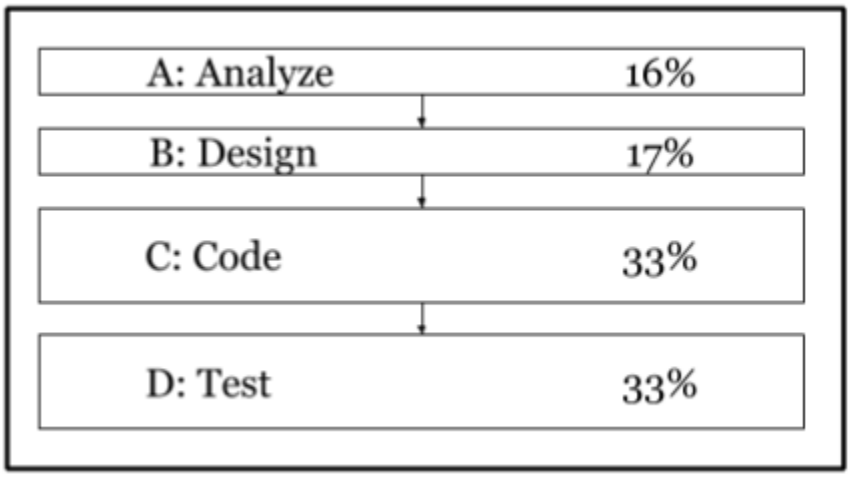
Model 1 The Waterfall Model

The following diagram shows the typical percentage of **total cost & effort** for each stage of software development. In practice, these percentages vary widely by project.



Questions (10 min) Start time: _____

1. Based on the Waterfall Model:

a) How many stages are there?

b) Which stage is 1st?

c) Which stage(s) must be finished before **coding** starts?

2. Based on the Waterfall Model:

a) What % of total effort is in the **last stage**?

b) What % of total effort is in the **first two stages**?

c) When the project is 25% completed, what % of **analysis** is done?

d) When the project is 25% completed, what % of **coding** is done?

e) When the project is 50% completed, what % of **coding** is done?

f) When the project is 50% completed, what % of **testing** is done?

3. It is important to find and fix errors in software.

a) If **coding** errors are found during **C: Code**,
in which stage should they be fixed?

b) If **coding** errors are found during **D: Test**,
in which stage should they be fixed?

c) If **analysis** errors are found during **B: Design**,
in which stage should they be fixed?

d) If **analysis** errors are found during **D: Test**,
in which stage should they be fixed?

e) Which stage focuses most on **finding** errors?

f) Are major errors in analysis and design more likely
when the project is **similar** to past projects, or **different**?

4. Later stages often take more time, effort, and money than expected. Explain why based on your answers to the previous questions.