Programming Basics
using
Real-life examples

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What is programming?

- Translating idea to steps in “restricted” English language
- Logical Thinking & execution
- simpler than logic puzzles
- lot simpler than learning a foreign language
- Not a cryptic activity
- Underlying concepts are similar to daily activities
- Technical Common Sense
Activities

• Recipe to make your favorite food
• Assembly instructions for a toy
• Getting ready in the morning
• Going from one place to another

What is common to all of these?

Sequence of steps
More activities

• Go by car or take the bus?
• Go for a movie or study?
• Fly or drive?
• Carry a lunch-box or get lunch in café?

What is common to all of these?

Selection / decision / IF statement
Even more activities

- Eat cookies from a box
- Answer an exam that has several questions
- Get a list of items at the grocery store
- Moving all items from one room to another

What is common to all of these?

repetition / loop / iteration
Summary

• All programs have only 3 control structures: Sequence, decision & repetition
• These are similar to activities we do every day.
• Problem description → High level idea → Detailed Pseudocode → Implement in specific language → Executable program