# Object Oriented Programming

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# ICE-5

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SS 1: Showing the initial screen, which is what you see as soon as the app is open.

A screenshot of a computer

AI-generated content may be incorrect.

SS 2: Showing the error message when entered non numeric and the next prompt

A screenshot of a computer program

AI-generated content may be incorrect.

SS 3: Showing the error message when entered negative number and the next prompt

A screenshot of a computer

AI-generated content may be incorrect.

SS 4 : Showing the error message when entered number greater than 40 and the next prompt

A screenshot of a computer

AI-generated content may be incorrect.

SS 5 & 6 : Showing the output screen with the exit prompt when entering valid inputs

A screenshot of a computer

AI-generated content may be incorrect.

A computer screen with white text

AI-generated content may be incorrect.

❓ QUESTION 1 – What is a recursive method?  
A function that calls itself to solve a problem, breaking it into smaller subproblems until reaching a base case.

❓ QUESTION 2 – Just like loops, what could go wrong if recursion is used incorrectly?  
Like infinite loops, recursion without a base case leads to infinite recursion, causing memory overflow and crashes.

❓ QUESTION 3 – How can recursive methods avoid the problem in Question2?  
Ensure a base case to stop recursion, reduce problem size with each call, and limit recursion depth if needed.