# Problem Statement (Step 1)

A program will generate a random number between 0 and 99 and user wants to guess the number.

# Analysis of the Problem (Step 2)

1. A program will generate the random number
2. User starts putting random value to guess
3. If user’s guess is more than 40 from target number (randomly generated number), then program shall response “COLD”
4. If user’s guess is within 20~39 from target number, then program shall response “COOL”
5. If user’s guess is within 10~19 from target number, then program shall response “WARM”
6. If user’s guess is within 1~9 from target number, then program shall response “HOT”
7. Once user gets right then program shall response “You got in in n trials. Where n is the number of users trial.

# High-level Algorithm (Step 3)

Generate the random number

Receive the number from user

Compare random number and user’s input, and count trials

Response for each input

# Detailed Algorithm (Step 4)

Generate the random number

* Generate random number between 0 and 99

Receive the number from user

* Convert user’s input to Integer

Compare random number and user’s input, and count trials

* Check if the input is an integer, otherwise response with warning
* If input is an integer but smaller then 0 or bigger than 99, response with warning.
* Count number of trials.
* Otherwise, response with “COLD”, “COOL”, “WARM”, “HOT”, or “You got in n trials”.