

IPO CHART

| Program name: | [PennyPitch (CH9,E13)] | |
|---------------------------------|---|--|
| INPUT | PROCESS | OUTPUT |
| Hint: What will the user input? | Hint: What is the program going to do with the input information? | Hint: What will the screen display after user input? |
| Run program | <pre> while (placed < totalPrizes) { int pos = rand.nextInt(25); String prize = prizes[rand.nextInt(prizes.length)]; if (board[pos].equals("-")) { board[pos] = prize; placed++; } } System.out.println("===" Penny Pitch Board ==="); for (int i = 0; i < board.length; i++) { System.out.print("[" + board[i] + "]"); if ((i + 1) % 5 == 0) System.out.println(); } int[] prizeCounts = new int[prizes.length]; </pre> | <pre> ==== Penny Pitch Board ==== [Ball] [-] [GameBoy] [-] [-] [GameBoy] [-] [Poster] [Keychain] [Ball] [GameBoy] [Ball] [-] [-] [GameBoy] [-] [-] [-] [Ball] [Poster] [Poster] [GameBoy] [Bear] [Keychain] [-] ==== Penny Tosses ==== Penny 1 landed on square 3 which has: - → No prize. Penny 2 landed on square 9 which has: Ball → You won a Ball! Penny 3 landed on square 9 which has: Ball → You won a Ball! Penny 4 landed on square 1 which has: - → No prize. Penny 5 landed on square 8 which has: Keychain → You won a Keychain! Penny 6 landed on square 5 which has: GameBoy → You won a GameBoy! Penny 7 landed on square 2 which has: GameBoy → You won a GameBoy! Penny 8 landed on square </pre> |

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System.out.println("\n====\n"
Penny Tosses ===");

for (int toss = 1; toss
<= 10; toss++) {
    int spot =
rand.nextInt(25);
    String landedOn =
board[spot];

System.out.print("Penny "
+ toss + " landed on
square " +
spot + " which
has: " + landedOn);

if
(!landedOn.equals("-")) {

System.out.println(" → You
won a " + landedOn + "!");

for (int i = 0; i <
prizes.length; i++) {
    if
(landedOn.equals(prizes[i])
) {

prizeCounts[i]++;
}
}
} else {

System.out.println(" → No
prize.");
}
}

System.out.println("\n====\n"
Prizes You Won ===");
for (int i = 0; i <
prizes.length; i++) {

System.out.println(prizes[i]
+ ": " + prizeCounts[i]);
}

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16 which has: - → No
prize.
Penny 9 landed on square
4 which has: - → No prize.
Penny 10 landed on
square 8 which has:
Keychain → You won a
Keychain!

==== Prizes You Won ====
Bear: 0
GameBoy: 2
Ball: 2
Poster: 0
Keychain: 2

