Explanation of `a1` Program by Aayush Ghosh

Function: `printCombinations(int totalCents)`
Enumerates all combinations of quarters (25¢), dimes (10¢), nickels (5¢), and pennies (1¢) summing to `totalCents`, printing each as:

```
x quarter(s), y dime(s), z nickel(s), w pennies
```

in descending coin order.

Algorithm:

1. Compute `maxQuarters = totalCents / 25`.
2. For `quarterCount = maxQuarters` down to 0:
   (a) Compute `centsAfterQuarters = totalCents - 25 * quarterCount`.
   (b) Compute `maxDimes = centsAfterQuarters / 10`.
   (c) For `dimeCount = maxDimes` down to 0:
      i. Compute `centsAfterDimes = centsAfterQuarters - 10 * dimeCount`.
      ii. Compute `maxNickels = centsAfterDimes / 5`.
      iii. For `nickelCount = maxNickels` down to 0:
         A. Compute `pennies = centsAfterDimes - 5 * nickelCount`.
         B. Output via:

```
printf("%d quarter(s), %d dime(s), %d nickel(s), %d pennies\n",
       quarterCount, dimeCount, nickelCount, pennies);
```

Function: `main(void)`
Reads integer `inputCents` from `stdin` (returns 1 on failure); otherwise calls `printCombinations(inputCents)` and returns 0.

Example (10¢):

```
$ echo 10 | ./a1
0 quarter(s), 1 dime(s), 0 nickel(s), 0 pennies
0 quarter(s), 0 dime(s), 2 nickel(s), 0 pennies
0 quarter(s), 0 dime(s), 1 nickel(s), 5 pennies
0 quarter(s), 0 dime(s), 0 nickel(s), 10 pennies
```