

# Programming Test - Random Fruits

This task requires the writing of a small piece of software to solve a real world problem. We want to see object oriented source code in C/C++. We do not expect you to spend more than one hour on this (nor should you need to).

The task:

We would like to randomly pick one fruit symbol from a list of 7 fruit symbols, named; { Seven, Bell, Melon, Plum, Orange, Lemon, Cherry } with a weighted probability out of 100 of { 10, 15, 20, 25, 15, 10, 5 } respectively, as shown in the table below...

0 ... 99						
Seven	Bell	Melon	Plum	Orange	Lemon	Cherry
0 ... 9	10 ... 24	25 ... 44	45 ... 69	70 ... 84	85 ... 94	95 ... 99

We would like you to write a solution that will perform 15 such random selections, listing the symbol chosen each time with a running count of how many times it has been chosen.

These function prototypes and code snippets *may* help...

```
1  #include "algorithm"
2
3
4  void srand(unsigned int seed);    // Seed for random-number generation
5  int rand(void);                  // Returns a pseudo-random number
6
7  // you may prefer to investigate the <random> header in C++11
8
9  srand((unsigned int)time(NULL));
10 int oneThing = rand();
11 std::cout << "One thing = " << oneThing << std endl();
12 printf("%s\t%2d\n", "Some thing = ", oneThing);
    system("pause");
```

Please supply us with:

- Code to solve this task in a text document, .cpp file or similar.
- A list of assumptions you may have had to make in creating a solution.

Note:

Contact us with any questions.

Your solution will be judged on the object oriented techniques and language structures used to accomplish the task, any creative ideas or advanced approaches, and the clarity and conciseness of your code.

Good luck!