.NET Developer Test
Simplified Slot Machine

This is a short task that aims to evaluate your problem-solving skills and your software development skills. It is not representative of what your day-to-day work would look like at Bede and is purely for the recruitment process.

We would like you to spend about 2 hours and you will be scored on your solution's readability, testability, extensibility, and configurability.

<u>Please follow this spec carefully!</u>

The problem:
You will have to build up a simplified slot machine game. The solution should be a console application.
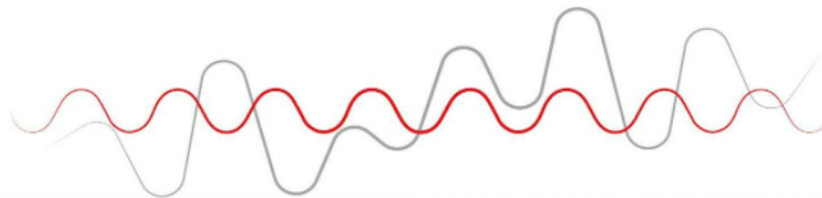
The rules:
- At the start of the game the player should enter the deposit amount (e.g. the initial money balance).
- After that, for each spin, the player is asked how much money he wants to stake.
- A table with the results of each spin is displayed to the player.
- The win amount should be displayed together with the total balance at the current stage. After the first spin the total balance will be equal to:
  ({deposit amount} - {stake amount}) + {win amount}.
- Game ends when the player balance hits 0.

The game:
- A slot game with dimensions 4 rows of 3 symbols each.
- Supports following symbols:

Symbol	Coefficient	Probability to appear on a cell
Apple (**A**)	0.4	45%
Banana (**B**)	0.6	35%
Pineapple (**P**)	0.8	15%
Wildcard (*****)	0	5%

- The symbols are placed randomly respecting the probability of each item. For example: there is 5% chance that a Wildcard will be placed in a cell and there is 45% chance for an Apple.

- The player will win only if one or more horizontal lines contain 3 matching symbols. _Wildcard (*) is a symbol that matches any other symbol (**A**, **B** or **P**)._
- The won amount should be the sum of the coefficients of the symbols on the winning line(s), multiplied by the stake amount.

Example:

```
Please deposit money you would like to play with:
200
Enter stake amount:
10

BAA
AAA
A*B
*AA

You have won: 20.0
Current balance is: 210.0
```

BAA // 0
AAA // 0.4 + 0.4 + 0.4 = 1.2 coefficient
A*B // 0
*AA // 0 + 0.4 + 0.4 = 0.8 coefficient

Player has staked 10 and winning coefficient is 1.2 + 0.8 = 2 so win is: 10 * 2 = 20.
The won amount is then added to the current balance of the player 200 - 10 + 20 = 210.

Win calculation examples:

Win combinations			Calculation of win
*	P	*	(0 + 0.8 + 0)*10 = 8
A	A	A	(0.4 + 0.4 + 0.4)*10 = 12
B	B	B	(0.6 + 0.6 + 0.6)*10 = 18
P	P	P	(0.8 + 0.8 + 0.8)*10 = 24
A	B	P	No matching symbols
*	A	B	No matching symbols