**FizzBuzz Game Documentation**

**Introduction**

FizzBuzz is a simple and popular programming exercise often used in job interviews and programming tutorials. It is designed to test the ability of a programmer to use basic programming concepts such as loops, conditionals, and logical reasoning.

**Rules of the Game**

1. Count numbers sequentially from 1 up to a given limit (commonly 100).
2. Replace numbers that are multiples of **3** with the word **“Fizz.”**
3. Replace numbers that are multiples of **5** with the word **“Buzz.”**
4. Replace numbers that are multiples of **both 3 and 5** with **“FizzBuzz.”**

**Example (for 1 to 15)**

1, 2, Fizz, 4, Buzz, Fizz, 7, 8, Fizz, Buzz, 11, Fizz, 13, 14, FizzBuzz

**Advantages**

* **Simple and clear**: Easy for beginners to understand and implement.
* **Good for practice**: Helps new programmers strengthen logic-building skills.
* **Useful in interviews**: Allows interviewers to quickly test fundamental coding knowledge.
* **Flexible**: Can be extended with new rules (e.g., adding words for other multiples).

**Disadvantages**

* **Too basic**: Not suitable for testing advanced programming skills.
* **Overused**: Many candidates already know the solution, which reduces its usefulness in interviews.
* **Unrealistic**: Rarely applies to real-world programming problems.

**Applications**

* Teaching programming basics in schools and tutorials.
* A warm-up exercise in coding interviews or coding competitions.
* A simple task to test programming environments and debugging tools.

**Conclusion**

FizzBuzz is a small but effective exercise for learning and testing programming fundamentals. While it may not have real-world applications, it is highly valuable as an educational tool and as a basic interview screening test.