

void generateWorld()

Java

```
public static void generateWorld() {
    Random rand = new Random();
    for (int y = 0; y < worldHeight; y++) {
        for (int x = 0; x < worldWidth; x++) {
            int randValue = rand.nextInt(100);
            if (randValue < 17) {
                world[x][y] = WOOD;
            } else if (randValue < 30) {
                world[x][y] = LEAVES;
            } else if (randValue < 45) {
                world[x][y] = STONE;
            } else if (randValue < 57) {
                world[x][y] = COAL_ORE;
            } else if (randValue < 65) {
                world[x][y] = IRON_ORE;
            } else if (randValue < 70) {
                world[x][y] = EMERALD_ORE;
            } else {
                world[x][y] = AIR;
            }
        }
    }
}
```

Pseudocode

```
BEGIN

FOR `<Integer> y` = 0; `<Integer> y` < `<Integer> worldHeight`
  FOR `<Integer> x` = 0; `<Integer> x` < `<Integer> worldWidth`
    Assign `<Integer> randValue` = `random value between 0 and 99`;
    IF `<Integer> randValue` < 17
      Set `<two dimensional Integer array> world @ indexes <Integer>
x, <Integer> y` = `<Integer> wood`;
    ELSE IF `<Integer> randValue` < 30
      Set `<two dimensional Integer array> world @ indexes <Integer>
x, <Integer> y` = `<Integer> leaves`;
    ELSE IF `<Integer> randValue` < 45
      Set `<two dimensional Integer array> world @ indexes <Integer>
x, <Integer> y` = `<Integer> stone`;
    ELSE IF `<Integer> randValue` < 57
      Set `<two dimensional Integer array> world @ indexes <Integer>
x, <Integer> y` = `<Integer> coal ore`;
    ELSE IF `<Integer> randValue` < 65
      Set `<two dimensional Integer array> world @ indexes <Integer>
x, <Integer> y` = `<Integer> iron ore`;
    ELSE IF `<Integer> randValue` < 70
      Set `<two dimensional Integer array> world @ indexes <Integer>
x, <Integer> y` = `<Integer> emerald ore`;
    ELSE
      Set `<two dimensional Integer array> world @ indexes <Integer>
x, <Integer> y` = `<Integer> air`;
      Set `<Integer> x` += 1;
      Set `<Integer> y` += 1;

END
```

Flowchart

