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1  /**
2   * header
3   */
4
5  import java.util.Scanner;
6  import static java.lang.System.*;
7  import java.util.Arrays;
8
9  public class UltimateRPS
10 {
11     private String playChoice;
12     private String compChoice;
13     private String[] choices;
14
15     public UltimateRPS()
16     {
17         playChoice = "";
18         compChoice = "";
19         choices = new String[] {" "};
20     } //default constructor
21
22     public UltimateRPS(String player, int choice)
23     {
24         setPlayers(player, choice);
25     } //loaded constructor
26
27     public void setPlayers(String player, int choice)
28     {
29         //sets the right array to choices depending on the game the player wants to play
30         switch (choice)
31         {
32             case 3:
33                 choices = new String[] {"rock", "paper", "scissor"};
34                 break;
35             case 5:
36                 choices = new String[] {"paper", "lizard", "scissor", "rock", "spock"};
37                 break;
38             case 7:
39                 choices = new String[] {"rock", "water", "air", "paper", "sponge",
40                                         "scissor", "fire"};
41                 break;
42             case 9:
43                 choices = new String[] {"rock", "gun", "water", "air", "paper",
44                                         "sponge", "human", "scissor", "fire"};
45                 break;
46             case 11:
47                 choices = new String[] {"rock", "sun", "devil", "water", "air",
48                                         "paper", "sponge", "wolf", "human", "scissor", "fire"};
49                 break;
50             case 15:
51                 choices = new String[] {"rock", "gun", "lightning", "devil", "dragon",
52                                         "water", "air", "paper", "sponge", "wolf", "tree", "human", "snake",
53                                         "scissor", "fire"};
54                 break;
55             case 25:
56                 choices = new String[] {"rock", "gun", "dynamite", "nuke", "lightning",
57                                         "devil", "dragon", "alien", "water", "bowl", "air", "moon", "paper",
58                                         "sponge", "wolf", "cockroach", "tree", "man", "woman", "monkey",

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        "snake", "axe", "scissor", "fire", "sun"};
52         case 101:
53             choices = new String[] {"dynamite", "helicopter", "tank", "sky", "nuke",
                "laser", "power", "medusa", "lightning", "electricity", "heat",
                "robot", "math", "video game", "fence", "devil", "gold", "platinum",
                "diamond", "dragon", "satan", "mountain", "prayer", "alien", "UFO",
                "rainbow", "TV", "water", "rain", "beer", "cup", "bowl", "guitar",
                "planet", "air", "toilet", "film", "grass", "moon", "airplane",
                "cloud", "paper", "book", "butter", "church", "sponge", "vampire",
                "money", "cross", "community", "brain", "cockroach", "spider", "fish",
                "bird", "cat", "wolf", "duck", "turnip", "tree", "bicycle", "noise",
                "car", "train", "home", "man", "baby", "woman", "police", "princess",
                "prince", "queen", "king", "monkey", "vulture", "porcupine", "blood",
                "snake", "castle", "computer", "peace", "axe", "cage", "poison",
                "scissor", "school", "chainsaw", "fire", "camera", "sun", "wall",
                "death", "rock", "sword", "whip", "law", "gun", "chain", "pit",
                "quicksand", "tornado"};
54         break;
55         default:
56             choices = new String[] {"I", "am", "a", "bad", "coder"};
57             break;
58     }
59     playChoice = player;
60
61     //randomly generates sign for player
62     int num = 0 + (int)( Math.random() * choices.length );
63     compChoice = choices[num];
64 }
65
66 public String determineWinner()
67 {
68     //if playChoice is the same as compChoice no winner (draw)
69     if ( compChoice.equals( playChoice ) )
70         return "!Draw Game!";
71
72     //gets index of player's choice
73     int index = Arrays.asList(choices).indexOf(playChoice);
74     int c = 1;
75     for (int i = ( (choices.length) - 1 ) / 2; i > -1; i--)
76     {
77         //tests to see if it is at the beginning of the array, if it is then moves
78         //the it to the end of the array
79         if (index - c == -1)
80         {
81             index = choices.length;
82             c = 1;
83         }
84         //tests to see if the string at the point is equal to the computers choice,
85         //if so then the player wins
86         if (compChoice.equals(choices[index - c]))
87         {
88             return ( "Player Wins <<" + playChoice + " beats " + compChoice + ">>" );
89         }
90         c++;
91     }
92     return ( "Computer wins <<" + compChoice + " beats " + playChoice + ">>" );
93
94     //tried using this but doesnt work for me, wven though its cleaner, I kept

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93         getting "player wins"
94
95         //http://stackoverflow.com/questions/9553058/scalable-solution-for-rock-paper-scissors
96         /*
97         switch ( ( ( (choices.length + Arrays.asList(choices).indexOf(playChoice) -
98         Arrays.asList(choices).indexOf(compChoice) ) % choices.length ) % 2 ) )
99         {
100             case 1:
101                 return "Player Wins <<" + playChoice + " beats " + compChoice + ">>";
102             case 0:
103                 return "Computer wins <<" + compChoice + " beats " + playChoice + ">>";
104             default:
105                 return "";
106         }
107     */
108 }
109
110 public String toString()
111 {
112     String output="";
113     output+="player had " + playChoice+"\n";
114     output+="computer had " + compChoice;
115     return output;
116 }
117
118 public boolean validWeapon ()
119 {
120     if (Arrays.asList(choices).indexOf(playChoice) == -1)
121         return false;
122     else
123         return true;
124 }
125 }
```