

Input data and preliminary stuff:

Team :=	}	"North Carolina"	}	py :=	0.9882
		"Virginia"			0.9120
		"Virginia Tech"			0.9320
		"Boston College"			0.9209
		"Maryland"			0.9709
		"Georgia Tech"			0.9594
		"Duke"			0.9723
		"Clemson"			0.9364
		"Florida St."			0.9248
		"North Carolina St."			0.7966
		"Wake Forest"			0.7527
		"Miami FL"			0.7333

ORIGIN := 1

i := 1.. last(py) j := 1.. last(py)

There are only 12 teams, so we won't worry about computational efficiency and instead just calculate the log5 winning percentage for all 144 matchups (even though many won't be used):

$$\log_5(A, B) := \frac{A - A \cdot B}{A + B - 2 \cdot A \cdot B} \quad \text{PCT}_{i,j} := \log_5(py_i, py_j)$$

PCT_{5,12} := 0

PCT_{12,5} := 1

PCT_{8,9} := 0

PCT_{9,8} := 1

PCT_{7,10} := 0

Calculate chances that each team will make it to Friday, Saturday, and Sunday:

PCT_{10,7} := 1

PCT_{6,11} := 0

PCT_{11,6} := 1

Fri :=	}	1	}	Sat :=	PCT _{8,9} ·PCT _{1,8} + PCT _{9,8} ·PCT _{1,9}
		1			PCT _{7,10} ·PCT _{2,7} + PCT _{10,7} ·PCT _{2,10}
		1			PCT _{6,11} ·PCT _{3,6} + PCT _{11,6} ·PCT _{3,11}
		1			PCT _{5,12} ·PCT _{4,5} + PCT _{12,5} ·PCT _{4,12}
		PCT _{5,12}			PCT _{5,12} ·PCT _{5,4}
		PCT _{6,11}			PCT _{6,11} ·PCT _{6,3}
		PCT _{7,10}			PCT _{7,10} ·PCT _{7,2}
		PCT _{8,9}			PCT _{8,9} ·PCT _{8,1}
		PCT _{9,8}			PCT _{9,8} ·PCT _{9,1}
		PCT _{10,7}			PCT _{10,7} ·PCT _{10,2}
		PCT _{11,6}			PCT _{11,6} ·PCT _{11,3}
		PCT _{12,5}			PCT _{12,5} ·PCT _{12,4}

Sun :=	}	Sat :=	Sat ₄ ·PCT _{1,4} + Sat ₅ ·PCT _{1,5} + Sat ₁₂ ·PCT _{1,12}
			Sat ₃ ·PCT _{2,3} + Sat ₆ ·PCT _{2,6} + Sat ₁₁ ·PCT _{2,11}
			Sat ₂ ·PCT _{3,2} + Sat ₇ ·PCT _{3,7} + Sat ₁₀ ·PCT _{3,10}
			Sat ₁ ·PCT _{4,1} + Sat ₈ ·PCT _{4,8} + Sat ₉ ·PCT _{4,9}
			Sat ₁ ·PCT _{5,1} + Sat ₈ ·PCT _{5,8} + Sat ₉ ·PCT _{5,9}
			Sat ₂ ·PCT _{6,2} + Sat ₇ ·PCT _{6,7} + Sat ₁₀ ·PCT _{6,10}
			Sat ₃ ·PCT _{7,3} + Sat ₆ ·PCT _{7,6} + Sat ₁₁ ·PCT _{7,11}
			Sat ₄ ·PCT _{8,4} + Sat ₅ ·PCT _{8,5} + Sat ₁₂ ·PCT _{8,12}
			Sat ₄ ·PCT _{9,4} + Sat ₅ ·PCT _{9,5} + Sat ₁₂ ·PCT _{9,12}
			Sat ₃ ·PCT _{10,3} + Sat ₆ ·PCT _{10,6} + Sat ₁₁ ·PCT _{10,11}
			Sat ₂ ·PCT _{11,2} + Sat ₇ ·PCT _{11,7} + Sat ₁₀ ·PCT _{11,10}
			Sat ₁ ·PCT _{12,1} + Sat ₈ ·PCT _{12,8} + Sat ₉ ·PCT _{12,9}

Calculate chance that team will win the championship:

$$\text{Champ} := \text{Sun} \cdot \left(\begin{array}{l} \text{Sun}_2 \cdot \text{PCT}_{1,2} + \text{Sun}_3 \cdot \text{PCT}_{1,3} + \text{Sun}_6 \cdot \text{PCT}_{1,6} + \text{Sun}_7 \cdot \text{PCT}_{1,7} + \text{Sun}_{10} \cdot \text{PCT}_{1,10} + \text{Sun}_{11} \cdot \text{PCT}_{1,11} \\ \text{Sun}_1 \cdot \text{PCT}_{2,1} + \text{Sun}_4 \cdot \text{PCT}_{2,4} + \text{Sun}_5 \cdot \text{PCT}_{2,5} + \text{Sun}_8 \cdot \text{PCT}_{2,8} + \text{Sun}_9 \cdot \text{PCT}_{2,9} + \text{Sun}_{12} \cdot \text{PCT}_{2,12} \\ \text{Sun}_1 \cdot \text{PCT}_{3,1} + \text{Sun}_4 \cdot \text{PCT}_{3,4} + \text{Sun}_5 \cdot \text{PCT}_{3,5} + \text{Sun}_8 \cdot \text{PCT}_{3,8} + \text{Sun}_9 \cdot \text{PCT}_{3,9} + \text{Sun}_{12} \cdot \text{PCT}_{3,12} \\ \text{Sun}_2 \cdot \text{PCT}_{4,2} + \text{Sun}_3 \cdot \text{PCT}_{4,3} + \text{Sun}_6 \cdot \text{PCT}_{4,6} + \text{Sun}_7 \cdot \text{PCT}_{4,7} + \text{Sun}_{10} \cdot \text{PCT}_{4,10} + \text{Sun}_{11} \cdot \text{PCT}_{4,11} \\ \text{Sun}_2 \cdot \text{PCT}_{5,2} + \text{Sun}_3 \cdot \text{PCT}_{5,3} + \text{Sun}_6 \cdot \text{PCT}_{5,6} + \text{Sun}_7 \cdot \text{PCT}_{5,7} + \text{Sun}_{10} \cdot \text{PCT}_{5,10} + \text{Sun}_{11} \cdot \text{PCT}_{5,11} \\ \text{Sun}_1 \cdot \text{PCT}_{6,1} + \text{Sun}_4 \cdot \text{PCT}_{6,4} + \text{Sun}_5 \cdot \text{PCT}_{6,5} + \text{Sun}_8 \cdot \text{PCT}_{6,8} + \text{Sun}_9 \cdot \text{PCT}_{6,9} + \text{Sun}_{12} \cdot \text{PCT}_{6,12} \\ \text{Sun}_1 \cdot \text{PCT}_{7,1} + \text{Sun}_4 \cdot \text{PCT}_{7,4} + \text{Sun}_5 \cdot \text{PCT}_{7,5} + \text{Sun}_8 \cdot \text{PCT}_{7,8} + \text{Sun}_9 \cdot \text{PCT}_{7,9} + \text{Sun}_{12} \cdot \text{PCT}_{7,12} \\ \text{Sun}_2 \cdot \text{PCT}_{8,2} + \text{Sun}_3 \cdot \text{PCT}_{8,3} + \text{Sun}_6 \cdot \text{PCT}_{8,6} + \text{Sun}_7 \cdot \text{PCT}_{8,7} + \text{Sun}_{10} \cdot \text{PCT}_{8,10} + \text{Sun}_{11} \cdot \text{PCT}_{8,11} \\ \text{Sun}_2 \cdot \text{PCT}_{9,2} + \text{Sun}_3 \cdot \text{PCT}_{9,3} + \text{Sun}_6 \cdot \text{PCT}_{9,6} + \text{Sun}_7 \cdot \text{PCT}_{9,7} + \text{Sun}_{10} \cdot \text{PCT}_{9,10} + \text{Sun}_{11} \cdot \text{PCT}_{9,11} \\ \text{Sun}_1 \cdot \text{PCT}_{10,1} + \text{Sun}_4 \cdot \text{PCT}_{10,4} + \text{Sun}_5 \cdot \text{PCT}_{10,5} + \text{Sun}_8 \cdot \text{PCT}_{10,8} + \text{Sun}_9 \cdot \text{PCT}_{10,9} + \text{Sun}_{12} \cdot \text{PCT}_{10,12} \\ \text{Sun}_1 \cdot \text{PCT}_{11,1} + \text{Sun}_4 \cdot \text{PCT}_{11,4} + \text{Sun}_5 \cdot \text{PCT}_{11,5} + \text{Sun}_8 \cdot \text{PCT}_{11,8} + \text{Sun}_9 \cdot \text{PCT}_{11,9} + \text{Sun}_{12} \cdot \text{PCT}_{11,12} \\ \text{Sun}_2 \cdot \text{PCT}_{12,2} + \text{Sun}_3 \cdot \text{PCT}_{12,3} + \text{Sun}_6 \cdot \text{PCT}_{12,6} + \text{Sun}_7 \cdot \text{PCT}_{12,7} + \text{Sun}_{10} \cdot \text{PCT}_{12,10} + \text{Sun}_{11} \cdot \text{PCT}_{12,11} \end{array} \right)$$

Check the math:

$$\sum \text{Champ} = 1.0000$$

Format and display results:

Results := augment(Team, Fri, Sat, Sun, Champ)

Results2 := reverse(csort(Results, 5))

Results =

	<u>Fri</u>	<u>Sat</u>	<u>Sun</u>	<u>Champ</u>
"North Carolina"	1.0000	0.8720	0.7806	0.6894
"Virginia"	1.0000	0.7257	0.3576	0.0685
"Virginia Tech"	1.0000	0.8183	0.5127	0.1181
"Boston College"	1.0000	0.8090	0.1365	0.0715
"Maryland"	0.0000	0.0000	0.0000	0.0000
"Georgia Tech"	0.0000	0.0000	0.0000	0.0000
"Duke"	0.0000	0.0000	0.0000	0.0000
"Clemson"	0.0000	0.0000	0.0000	0.0000
"Florida St."	1.0000	0.1280	0.0732	0.0393
"North Carolina St."	1.0000	0.2743	0.0779	0.0072
"Wake Forest"	1.0000	0.1817	0.0517	0.0039
"Miami FL"	1.0000	0.1910	0.0098	0.0021

Results2 =

	<u>Fri</u>	<u>Sat</u>	<u>Sun</u>	<u>Champ</u>
"North Carolina"	1.0000	0.8720	0.7806	0.6894
"Virginia Tech"	1.0000	0.8183	0.5127	0.1181
"Boston College"	1.0000	0.8090	0.1365	0.0715
"Virginia"	1.0000	0.7257	0.3576	0.0685
"Florida St."	1.0000	0.1280	0.0732	0.0393
"North Carolina St."	1.0000	0.2743	0.0779	0.0072
"Wake Forest"	1.0000	0.1817	0.0517	0.0039
"Miami FL"	1.0000	0.1910	0.0098	0.0021
"Maryland"	0.0000	0.0000	0.0000	0.0000
"Clemson"	0.0000	0.0000	0.0000	0.0000
"Georgia Tech"	0.0000	0.0000	0.0000	0.0000
"Duke"	0.0000	0.0000	0.0000	0.0000