LogiTrumps

A card game written in VBA for MS Word, Excel and PowerPoint.

# Description









LogiTrumps is a trump card game with retro computers. It’s like we used to play it in the 80ies. Each player (you and the computer) gets the same number of cards. Each card represents a retro computer and has several values like year, memory and colours. Each card has its strengths and weaknesses. If a computer has a lot of memory or colours, he usually is not that old and therefor would likely loose in the year category. Usually the higher value wins. The year category is the only category where the lower value wins. The player who gets all cards first wins the game.

# How to play

Open one of the office files (Word, Excel, PowerPoint) and click on RUN.

At the beginning of the game the cards are shuffled. You and the computer get the same number of cards. You can choose a category by typing the corresponding number. The program will calculate weather you won, lose or make a draw against the computers card. If you win, you get the computers card. If you lose the computer gets your card. If it’s a draw you keep your cards and just continue with the next card. If it’s the computers turn you can just watch what the computer choses and what happens.

# Emulator Usage

Nothing to emulate. You need MS Office. I used the current version (March 2020) of Microsoft Office 365.

# Variables and Data Structures

|  |  |
| --- | --- |
| Variable | Usage |
| u | Users turn (1) or computer (0) |
| p[] | Person’s array for position of cards |
| c[] | Computer’s array for position of cards |
| r | Number of cards of person |
| e | Number of cards of computer |
| t$[] | Name of cards |
| a(card, factor) | Factors of the cards |
| p | Current position/card of person |
| c | Current position/card of computer |
| n | Round |
| b | Selected factor |
| z | Factor to print |
| d | User (1) or computer (0) to be printed as symbol |

# Code

Sub RunProgram()

Dim a(), t(), pp(8), cc(8): t() = Array("zx80", "a500", "cpc464", "atari400", "c64", "c128", "c16", "a]["): a() = Array(Array(-1980, 1, 2), Array(-1987, 512, 4096), Array(-1984, 64, 27), Array(-1979, 8, 128), Array(-1982, 64, 16), Array(-1985, 128, \_

16), Array(-1984, 16, 121), Array(-1977, 4, 15)): u = 1: r = 4: e = 4: For c = 0 To 7: p = Int(Rnd \* 8): While (pp(p) + cc(p)) > 0: p = (p + 1) Mod 8: Wend: pp(p) = (c + 1) \* -(c < 4): cc(p) = (c - 3) \* -(c > 3): Next

vier: n = n + 1: i = 0: While pp(i) <> n: i = i + 1: Wend: p = i: i = 0: While cc(i) <> n: i = i + 1: Wend: c = i:

get\_b: b = -Int(a(c)(2) > 16) \* 2: If u Then b = InputBox(t(p) & ":" & vbCrLf & "1: " & -a(p)(0) & vbCrLf & "2: " & a(p)(1) & " kb" & vbCrLf & "3: " & a(p)(2) & " cols", "Eingabe (" & r & ":" & e & ")"): b = b - 1: If b < 0 Or b > 2 Then GoTo get\_b

msg = t(p) & ": " & vbTab & -a(p)(0) & " " & a(p)(1) & " kb " & a(p)(2) & " cols" & vbCrLf & "vs" & vbCrLf & t(c) & ": " & vbTab & -a(c)(0) & " " & a(c)(1) & " kb " & a(c)(2) & " cols" & vbCrLf & vbCrLf & "[" & b + 1 & "]" & vbTab & Abs(a(p)(b)) & \_

" vs " & Abs(a(c)(b)) & vbCrLf & vbCrLf: pp(p) = n + r: cc(c) = n + e: If a(p)(b) > a(c)(b) Then pp(c) = n + r + 1: cc(c) = 0: r = r + 1: e = e - 1: u = 1: MsgBox msg & ":-)", vbInformation, "Turn: Won (" & r & ":" & e & ")"

If a(p)(b) < a(c)(b) Then cc(p) = n + e + 1: pp(p) = 0: r = r - 1: e = e + 1: u = 0: MsgBox msg & ":-(", vbCritical, "Turn: Lost (" & r & ":" & e & ")"

If e = 0 Then MsgBox "YOU WON!", vbInformation, "GAME OVER" Else If r = 0 Then MsgBox "YOU LOST!", vbCritical, "GAME OVER" Else GoTo vier

End Sub

# Code description

Line 1 and 10 form the “Sub” function / procedure, so it works with Excel / VBA. In fact, it’s two lost lines. The code is an 8 liner.

Line 2: Create the array with the cards.

Line 3 & 4: Sort the cards.

Line 5: Calculate the factor or ask the factor. Depending on who’s turn it is.

Line 6: Create a message with the cards and their data.

Line 7: If person wins, he gets the cards and has the next turn.

Line 8: If computer wins, he gets the cards and has the next turn.

Line 9: Show the winner or go on with the game.

# Line lengths

Up to 255 characters.

# Further Information

This program is part of a bigger project and available for different platforms. For more information check <https://logiker.com/LogiTrumps>.