Pseudo code 2.4 à 3.2

//2.5 Jeu du 0 - 2

Variables :

int computerChoice, userChoice, countUser, countComputer

Code :

countUser <-- 0

countComputer <--0

DO

// Pour des RANDOM en C#: https://docs.microsoft.com/fr-fr/dotnet/api/system.random?view=net-6.0

computerChoice <-- RANDOM(0, 2) //2 inclus

WRITE "Choose a move to play between 0, 1 or 2. Enter a negative number to quit"

READ userChoice

IF userChoice is negative THEN

Quit program

ELSE

WRITE "Computer choice was : " + computerChoice

Check if the user or the computer win this round and score points

// ItsTimeToDuel(userChoice, userCounter, computerChoice, computerCounter)

WRITE "Computer score : " + countComputer+ " ; user score : " + countUser

END IF

WHILE (CheckNoVictory(userCounter, computerCounter))

Function :

void ItsTimeToDuel(int \_userChoice, int \_userCounter, int \_computerChoice, int \_computerCounter)

Variables :

int diff

Code :

diff <-- \_userChoice - \_computerChoice

SWITCH diff

CASE 2:

WRITE "Point to the user"

\_userCounter <-- \_userCounter + 1

BREAK

CASE -2:

WRITE "Point to the computer

\_computerCounter <-- \_computerCounter + 1

BREAK

CASE 1:

WRITE "Point to the computer

\_computerCounter <-- \_computerCounter + 1

BREAK

CASE -1:

WRITE "Point to the user"

\_userCounter <-- \_userCounter + 1

BREAK

DEFAULT:

WRITE "DRAW !"

BREAK

bool CheckNoVictory(int \_userCounter, int \_computerCounter)

Variables:

const int victoryScore

Code :

victoryScore <-- 10

IF (\_userCounter == victoryScore) THEN

WRITE "User wins !"

return false

ELSE

IF (\_computerCounter == victoryScore THEN

WRITE "Computer wins !"

return false

ELSE

return true

END IF

END IF

56 Algo/Pseudo code - Exercice - Algo 05 - 2.7.1 - correction - Copie.txt

@@ -0,0 +1,56 @@

// calculer le nombre de jeunes

Variables :

const int twenty

int[] peopleAge

int i, youngCounter

Code :

youngCounter <-- 0

twenty <-- 20

peopleAge <-- int[twenty]

WRITE "Enter the age of " + twenty + " persons one after another"

FOR i FROM 0 TO twenty

READ peopleAge[i]

END FOR

FOR i FROM 0 TO peopleAge.Length

IF peopleAge[i] < twenty THEN

youngCounter <-- youngCounter + 1

END IF

END FOR

WRITE "There are " + youngCounter + " young among the people"

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Variables :

const int twenty

int i, youngCounter

Code :

youngCounter <-- 0

twenty <-- 20

peopleAge <-- int[twenty]

WRITE "Enter the age of " + twenty + " persons one after another"

FOR i FROM 0 TO twenty

IF READ < twenty THEN

youngCounter <-- youngCounter + 1

END IF

END FOR

WRITE "There are " + youngCounter + " young among the people"

47 Algo/Pseudo code - Exercice - Algo 05 - 2.7.2 - correction - Copie.txt

@@ -0,0 +1,47 @@

// calculer le nombre de jeunes

Variables :

const int twenty

int[] peopleAge

int i, youngCounter, oldCounter, twentyCounter

Code :

youngCounter <-- 0

twenty <-- 20

peopleAge <-- int[twenty]

WRITE "Enter the age of " + twenty + " persons one after another"

FOR i FROM 0 TO twenty

READ peopleAge[i]

END FOR

FOR i FROM 0 TO peopleAge.Length

IF peopleAge[i] < twenty

youngCounter <-- youngCounter + 1

ELSE IF peopleAge[i] > twenty

oldCounter <-- oldCounter + 1

ELSE

twentyCounter <-- twentyCounter + 1

END IF

END IF

END FOR

IF youngCounter == 20 THEN

WRITE "EVERYBODY IS LESS THAN 20"

ELSE IF oldCounter == 20 THEN

WRITE "EVERYBODY IS MORE THAN 20"

ELSE

WRITE "There are " + youngCounter + " young people\n"

+ "There are " + oldCounter + " old people\n" + "There are " + twentyCounter + " people who are 20"

END IF

END IF

23 Algo/Pseudo code - Exercice - Algo 05 - 3.1 - correction - Copie.txt

@@ -0,0 +1,23 @@

// 3.1 Rechercher un nombre dans un tableau (en moins de 20 minutes)

Varibales :

int[] tableau

int N, i

bool pasTrouve

CODE :

pasTrouve <-- true

tableau <-- [0, 12, 15, 16, 17, 30, 35, 42, 72, 101, 218]

WRITE "Entrez un nombre entier à chercher"

READ N

FOR i FROM 0 TO taille\_du\_tableau

IF tableau[i] == N

WRITE "Le nombre " + N + " est dans le tableau à l'indice " + i

pasTrouve <-- false

END IF

END FOR

IF pasTrouve

WRITE "Le nombre " + N + " n'a pas été trouvé dans le tableau."

END IF

34 Algo/Pseudo code - Exercice - Algo 05 - 3.2 - correction.txt

@@ -0,0 +1,34 @@

// 3.2 Rechercher une lettre dans un chaine de caractères (12 minutes)

Variables :

string stringToCheck

char searchedChar

bool notFound

int counter, i

CODE :

counter <-- 0

WRITE "Write a sentence finishing with a dot '.'"

READ stringToCheck

IF stringToCheck[stringToCheck.Length -1] != '.'

stringToCheck <-- stringToCheck + '.'

END IF

IF (stringToCheck == '.') THEN

Write "Empty string"

ELSE

WRITE "Type a letter to find in your previous sentence"

READ searchedChar

FOR i FROM 0 TO stringToCheck.Length

IF (stringToCheck[i] == searchedChar)

counter <-- counter + 1

END IF

END FOR

IF counter > 0

WRITE searchedChar + " appears " + counter + " times in your sentence"

ELSE

WRITE "Not found"

END IF

END IF