

#DARKMODE

O/L I.C.T.

PROGRAMMING

2017 A/LS
ISLAND
1ST, 2ND,
7TH & 13TH

2019 A/LS
ISLAND
1ST, 3RD
& 4TH

it

itguru.lk
teran.lk

TERAN SUBASINGHE

MBCS, BEST PERFORMER IN 2015 BATCH OF
BSC. (HONS.) IN COMPUTER SCIENCE -
UNIVERSITY OF GREENWICH, UK.





it

itguru.lk
teran.lk

ALGORITHMS VS PROGRAMMING

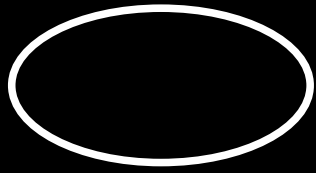
#PEACE

NOT ANOTHER WAR

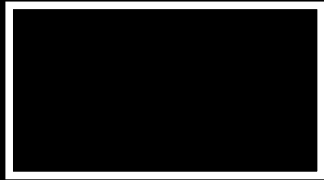
Algorithm is just a **plan** to develop a program
Flowcharts and Pseudocodes are used for this

Program is an **executable** version of algorithm
Pascal Language is used for this

FLOWCHART COMPONENTS



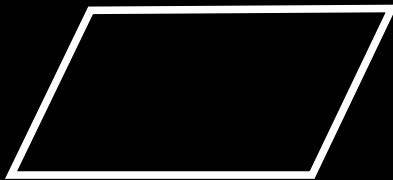
Start/Stop



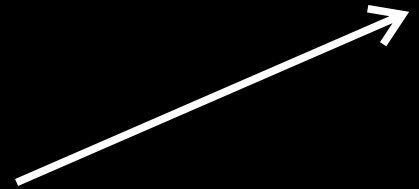
Process



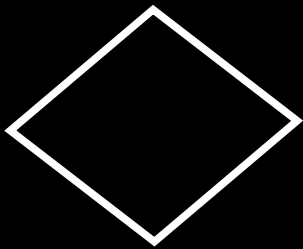
Connector
(Optional to use)



Input/Output



Flow



Decision
(Condition)

NOT YOUR
OPPONENTS
ANYMORE



PSEUDOCODE

Just Simple English
without the Shapes

Written Nicely
with Tabs (Indentation)



BEGIN

 Display "Bumblebee"

END.

itguru.lk
teran.lk

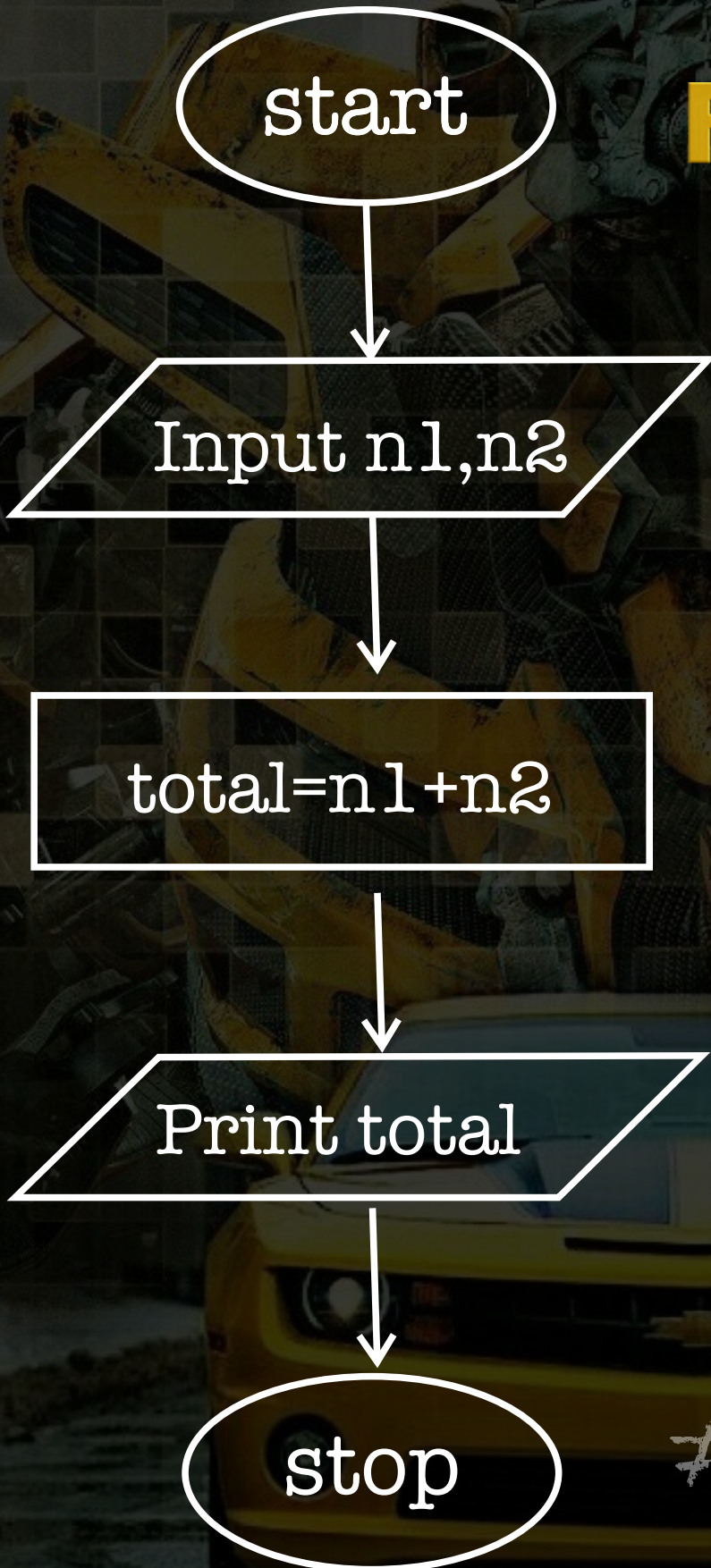


#MOREINTOHUMANS

FLOW CHART

VS

PSEUDOCODE



BEGIN

INPUT n1,n2

total=n1+n2

Display total

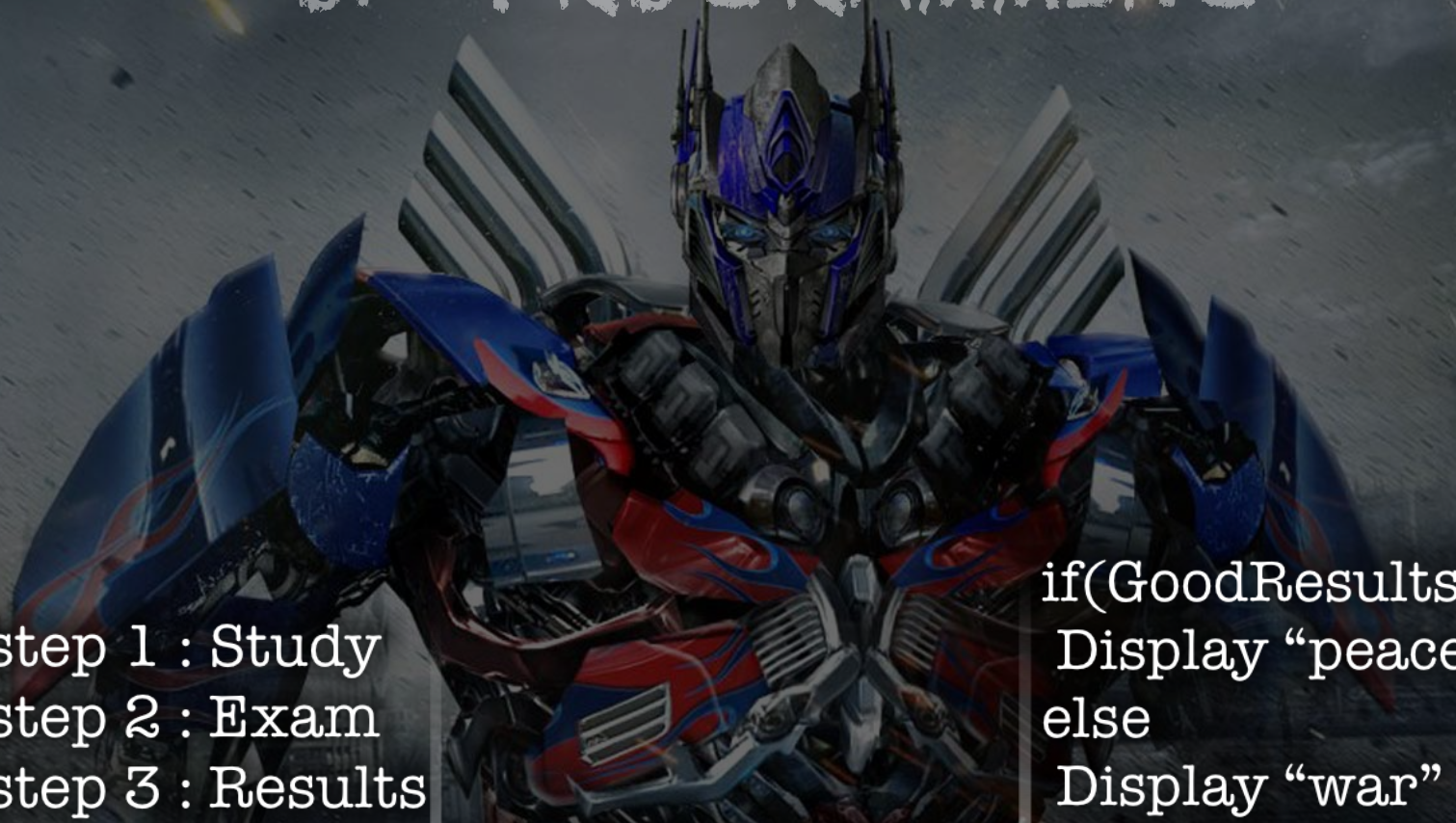
END



#SEQUENCE

#SUPERSIMPLE

OPTIMUS PRIME OF PROGRAMMING



step 1 : Study
step 2 : Exam
step 3 : Results

SEQUENCE

step by step
execution
of
instructions

```
while(fail) do  
  write exam  
end  
Display "passed"
```

REPETITION

repeating a
set of instructions
based on a
condition
(decision)

```
if(GoodResults)  
  Display "peace"  
else  
  Display "war"
```

SELECTION

executing
instructions
based
on a condition

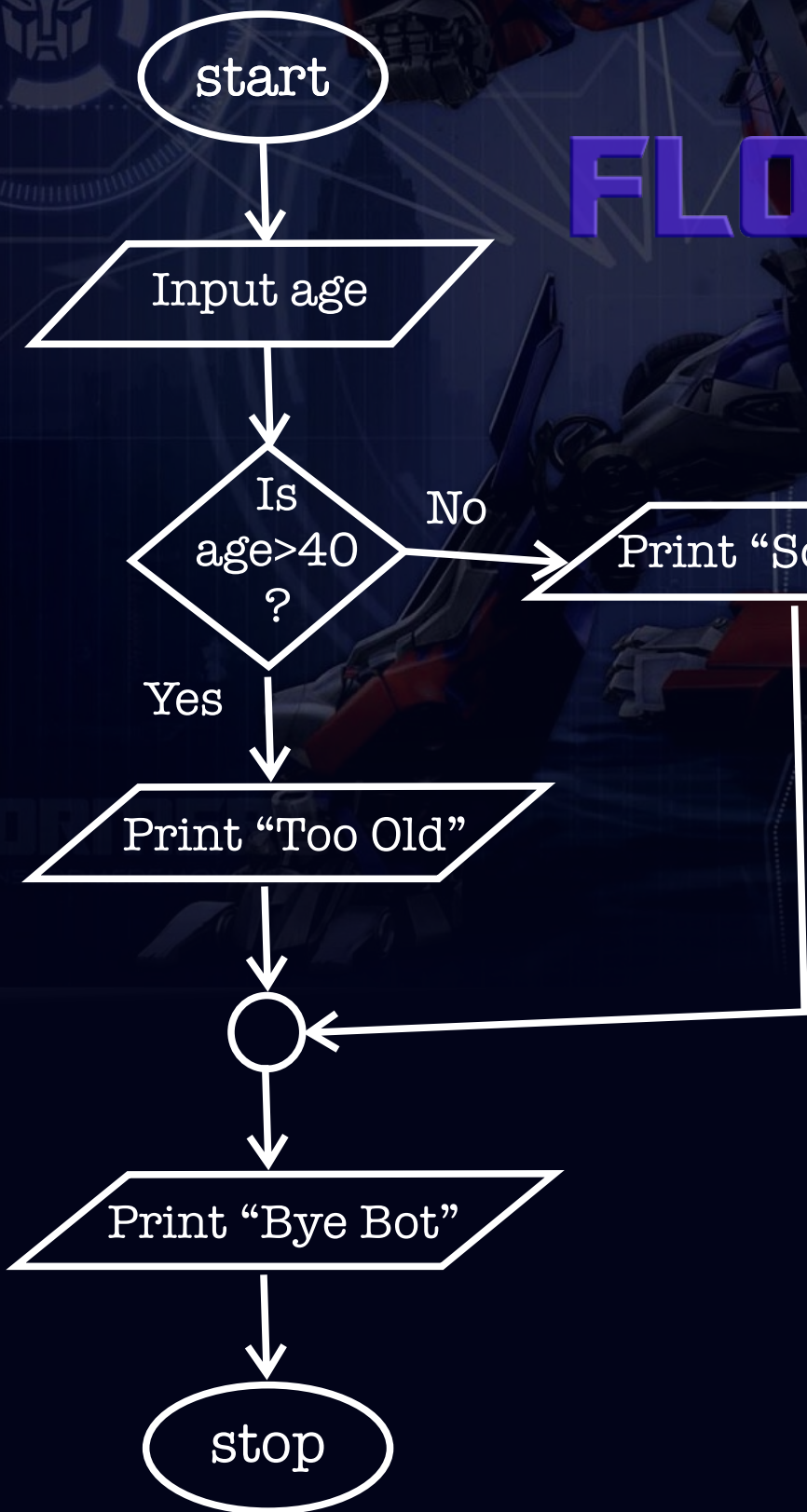


itguru.lk
teran.lk

CONTROL STRUCTURES

CONDITIONS

FLOWCHART



BEGIN

INPUT age

IF age > 40 THEN

print "Too Old"

ELSE

print "So Young"

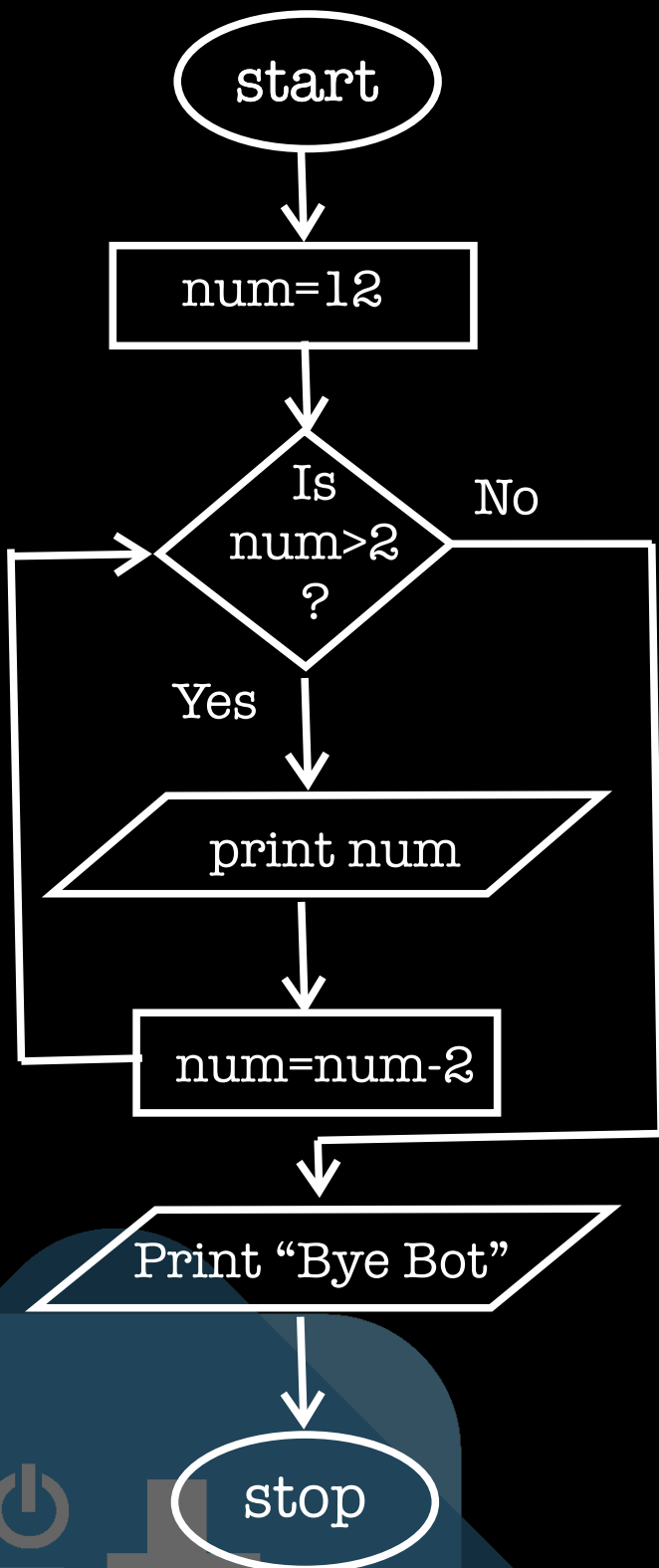
END IF

END

PSEUDOCODE

#SELECTION

REPETITION



```
BEGIN  
num=12  
WHILE num>2 DO  
    print num  
    num=num-2  
END WHILE  
print "Bye Bot"  
END.
```

#ITERATION
LIFE IS A LOOP



PASCAL

by Niklaus Wirth

#PRACTICALS



Let's code during the session

BOOK

&

COMPUTER