File Edit View Help

File Edit View Help

File Edit View Help

MAGICAL

File Edit View Help

File Edit View Help

File Edit View Help

INPUT

File Edit View Help

INPUT

File Edit View Help

INPUT

Output

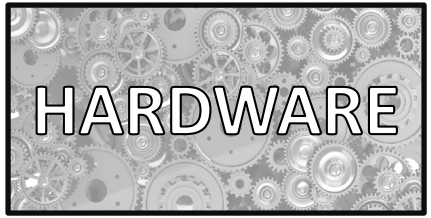
File Edit View Help

File Edit View Help

HARDWARE

SOFTWARE

File Edit View Help

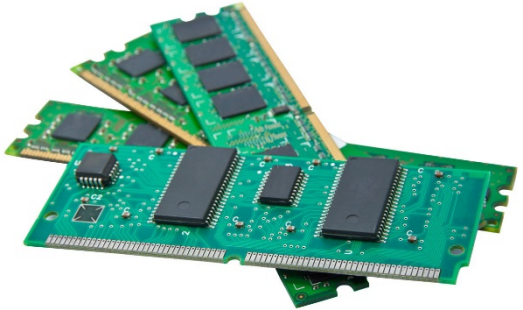


File Edit View Help

HARDWARE

CPU

Memory

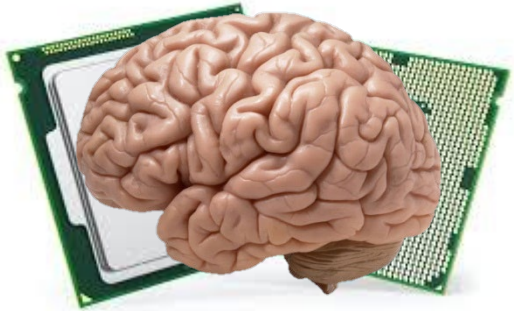


File Edit View Help

HARDWARE

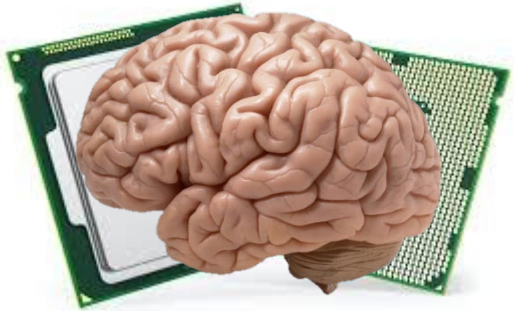
File Edit View Help

HARDWARE



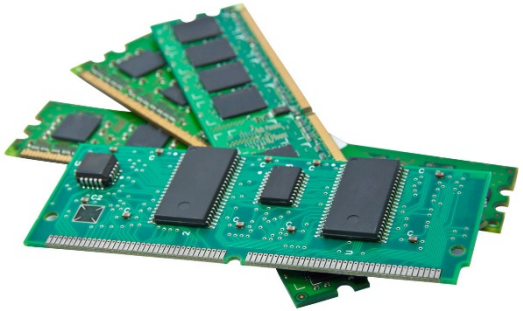
File Edit View Help

HARDWARE



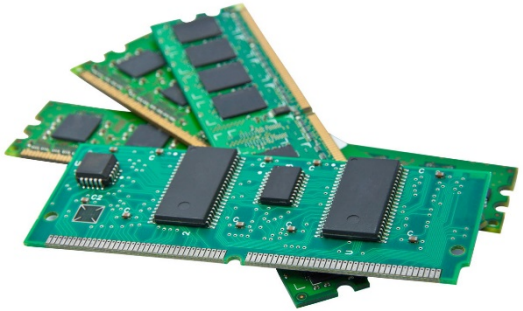
File Edit View Help

HARDWARE



File Edit View Help

HARDWARE



RAM

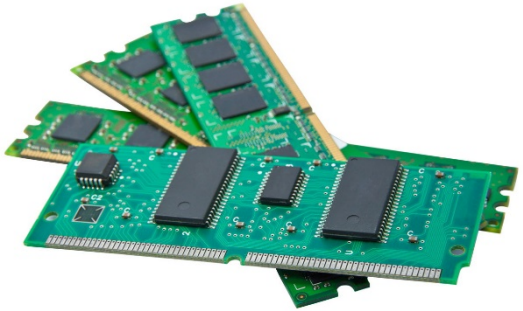
File Edit View Help

HARDWARE

Secondary

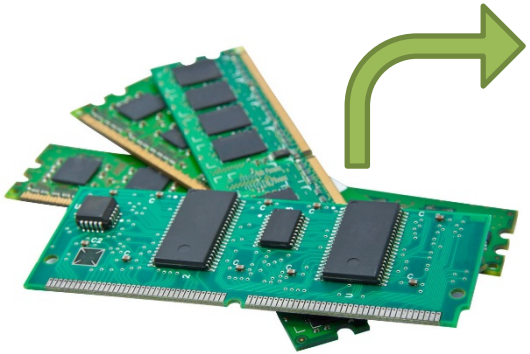
File Edit View Help

HARDWARE



File Edit View Help

HARDWARE



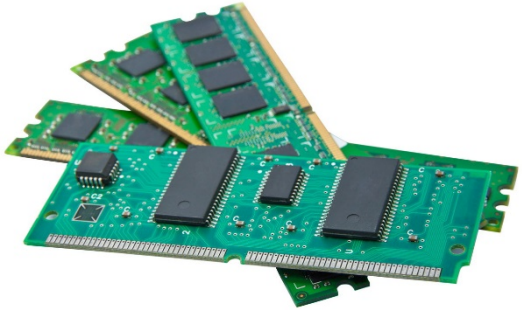
Memory	
Addresses	Values
…	
256	01000001
260	01000010
264	01000010
268	01000001
…	

File Edit View Help

Running Software

Secondary

Main



CPU

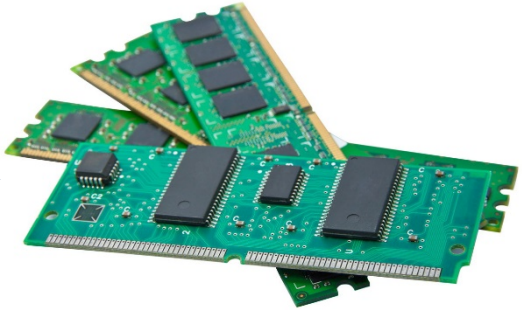
File Edit View Help

Running Software

Secondary

Load

Main



CPU

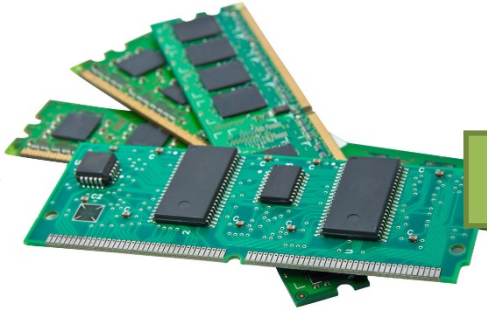
File Edit View Help

Running Software

Secondary

Load

Main



Run Code

CPU

File Edit View Help

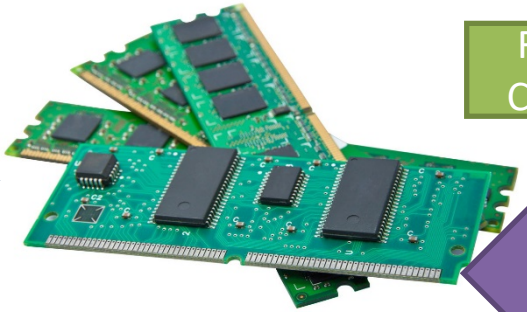
Running Software

Secondary

Main

CPU

Load



Run Code

Store Info

File Edit View Help

File Edit View Help

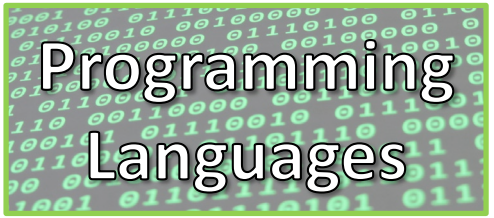
Algorithm (ˈalgəˌriT_Həm) noun
A set of instructions to
solve a problem

File Edit View Help

SOFTWARE

Program (prō ˌgram) *noun*
A set of instructions for a computer to follow.

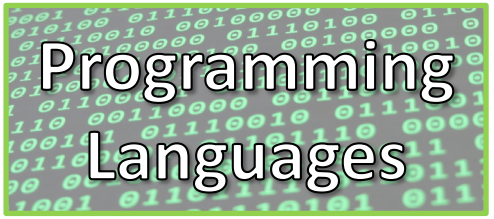
File Edit View Help



File Edit View Help

Programming Languages

File Edit View Help



LOW LEVEL

File Edit View Help

Programming Languages

LOW LEVEL

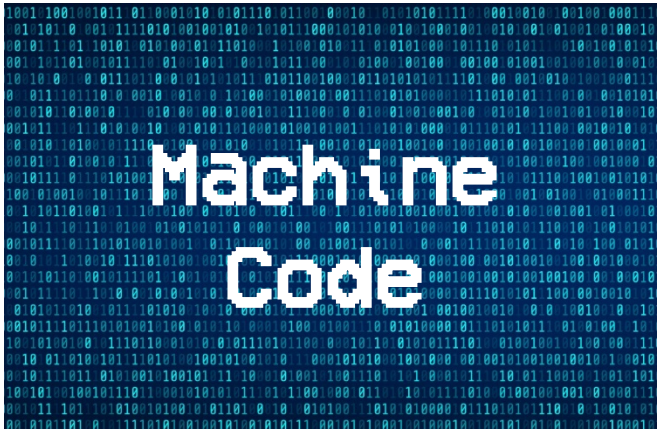
```
                                    ************************************
                                    * FUNCTION: INCH - Input character
                                    * INPUT: none
                                    * OUTPUT: char in acc A
                                    * DESTROYS: acc A
                                    * CALLS: none
                                    * DESCRIPTION: Gets 1 character from terminal

C010 B6 80 04  INCH    LDA A  ACIA      GET STATUS
C013 47                ASR A            SHIFT RDRF FLAG INTO CARRY
C014 24 FA             BCC    INCH      RECIEVE NOT READY
C016 B6 80 05          LDA A  ACIA+1    GET CHAR
C019 84 7F             AND A  #$7F      MASK PARITY
C01B 7E C0 79          JMP    OUTCH     ECHO & RTS
```

File Edit View Help

Programming Languages

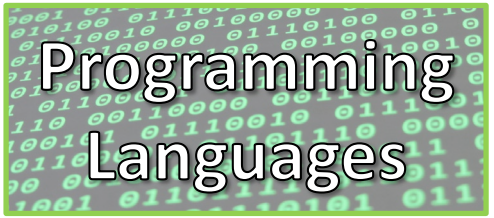
LOW LEVEL




```
                                    ************************************
                                    * FUNCTION: INCH - Input character
                                    * INPUT: none
                                    * OUTPUT: char in acc A
                                    * DESTROYS: acc A
                                    * CALLS: none
                                    * DESCRIPTION: Gets 1 character from terminal
C010 B6 80 04   INCH    LDA A  ACIA     GET STATUS
C013 47                 ASR A           SHIFT RDRF FLAG INTO CARRY
C014 24 FA              BCC    INCH     RECIEVE NOT READY
C016 B6 80 05           LDA A  ACIA+1   GET CHAR
C019 84 7F              AND A  #$7F     MASK PARITY
C01B 7E C0 79           JMP    OUTCH    ECHO & RTS
```

Assembly

File Edit View Help



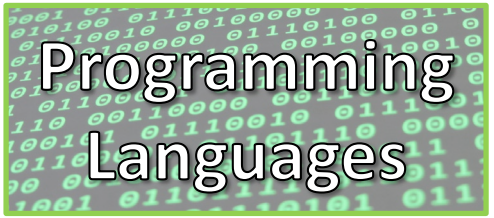
High Level

File Edit View Help

Programming Languages

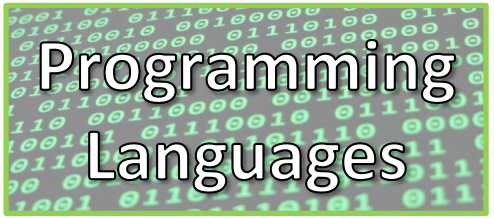
High Level

File Edit View Help



High Level

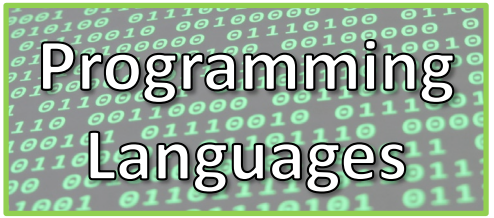
File Edit View Help



High Level

Nouns and Verbs

File Edit View Help



High Level

Syntax

File Edit View Help

Programming Languages

File Edit View Help

Programming Languages

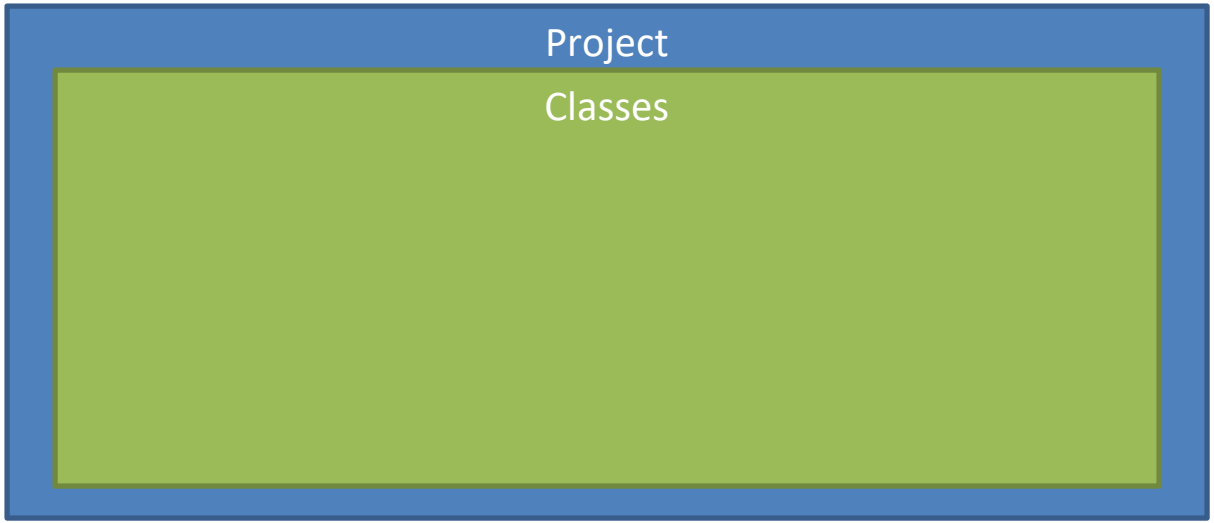
Compiler

File Edit View Help

File Edit View Help

Project

File Edit View Help



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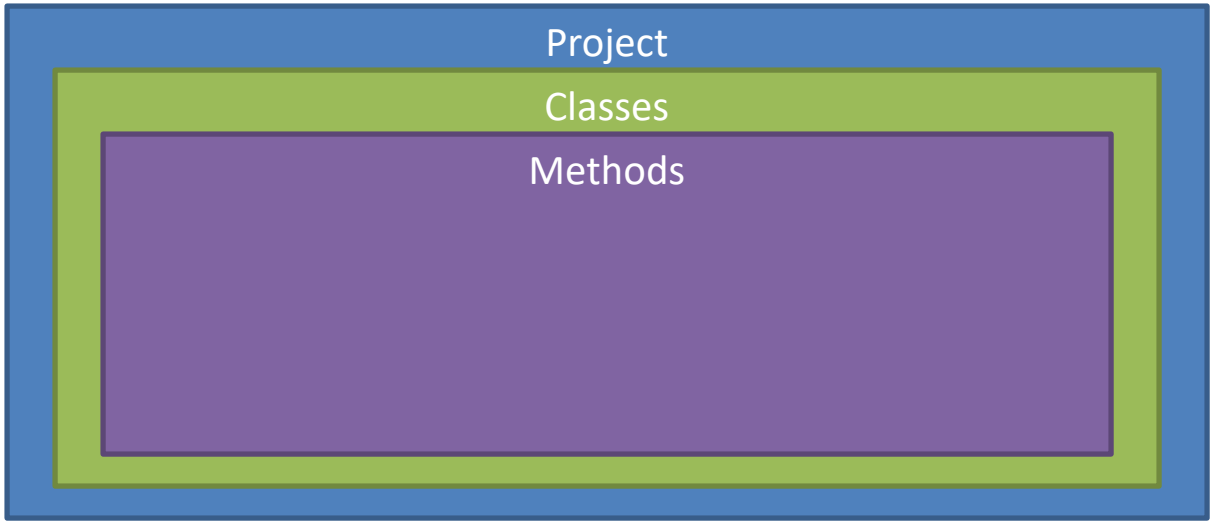

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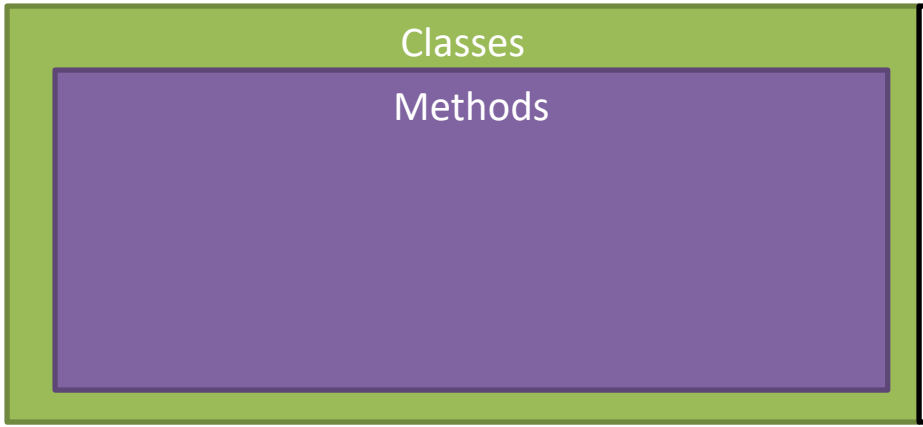
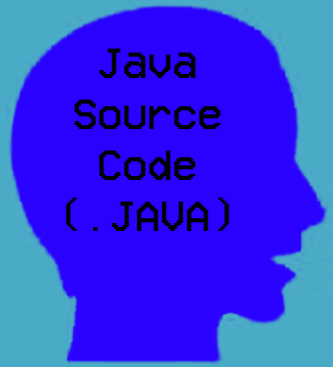


- Source Code in files with “.JAVA” extension
- The filename must MATCH the name of the class
- Everything is an “Object”

File Edit View Help

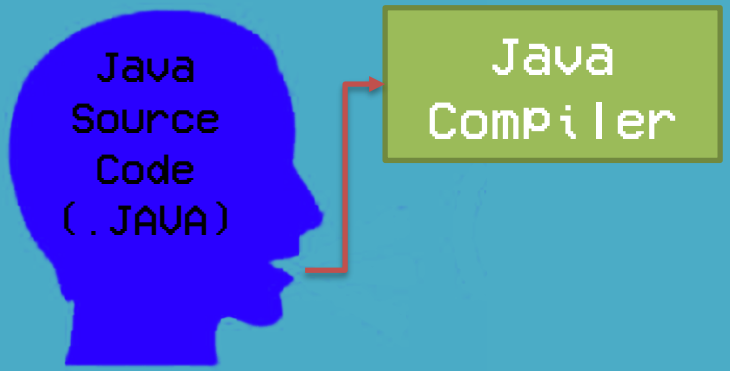
Compilation



Running

File Edit View Help

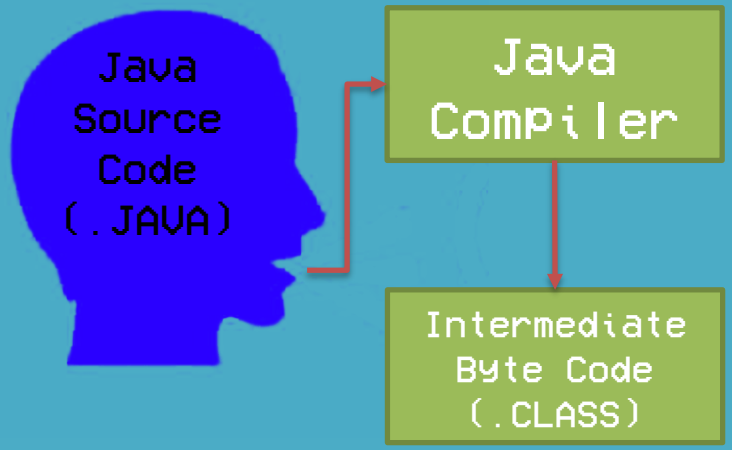
Compilation



Running

File Edit View Help

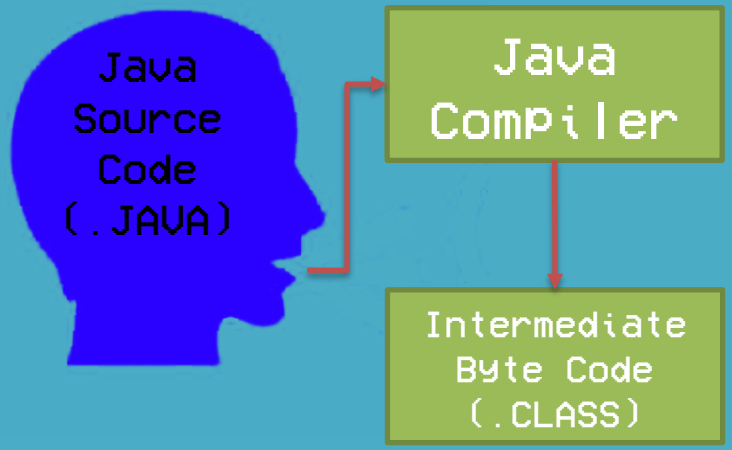
Compilation



Running

File Edit View Help

Compilation



Running

File Edit View Help

Compilation

Java Source Code (.JAVA)

Java Compiler

Intermediate Byte Code (.CLASS)

Running

Java Virtual Machine (JVM)