# MODULE 17 : SUMMARY

* + - * 1. VARIABLES
        2. JS PRINT PROCEDURE CONSOL/DOM
        3. DATA TYPE
        4. TYPE CONVERSIONS
        5. OPERATORS

## JS OUTPUT : 17-1 Introduction to JavaScript, Run JavaScript in VSCode

* + CONSOLE
  + VS CODE TERMINAL
  + CODEPEN.IO

## VARIABLES : 17-2 What is variable, five things you need to declare a variable

* + RULES FOR VARIABLE-NAME DECLARE
    - PUT KEYWORD VAR / LET / CONST
    - PUT VARIABLE-NAME
    - PUT **=** SIGN
    - PUT VALUE
    - PUT **;** SIGN

## DARA-TYPE : 17-3 Variable type, Numeric, String, Boolean

* + Variable type
    - STRING
    - NUMBER
    - BOOLEAN

## 17-4 JavaScript Keyword, Variable name naming convention and best practice

* + VARIABLE NAMING RULES
    - RESERVED KEYWORDS
    - MEANINGFUL
    - NO SHORT-FORM FOR MULTI WORD VARIABLES
    - NO-SPACE FOR MULTI WORD VARIABLES
    - CAMEL-CASE FOR MULTI WORD VARIABLES

## 17-5 Simple Mathematical operations in JavaScript

* + OPERATORS : ADDITIONAL
    - PROJECT: RICE 40 TK; WATER 30TK ; RICE + WATER TK?
    - PROJECT: RICE 40 TK; WATER 30TK ; TOTAL TK?
    - PROJECT: ONE EGG 42 TK ; NEED 7 EGGS, HOW MANY TK?
    - PROJECT: ONE EGG 42 TK ; HAVE 700 TK, HOW MANY EGGS?

## 17-6 (advanced) Mathematical operation shorthand

* + RECAP of 17-5
  + OPERATORS : INCREMENT / DECREMENT
    - PROJECT: SHORTHAND INCREASE ONLY 1
    - PROJECT: SHORTHAND DECREASE ONLY 1
    - PROJECT: SHORTHAND INCREASE ONLY 10
    - PROJECT: SHORTHAND DECREASE ONLY 10

## DATA-TYPE CONVERSION: 17-7 (advanced) String Concatenation, Integer float parseInt parseFloat type conversion

* + OPERATORS : STRING
    - PROJECT : ADD ”ALI” WITH “RAHIM MUHAMAD”
  + NUMBER-TYPE : INTEGER AND FLOAT
    - PROJECT : CONVERT STRING “100” TO INTEGER-NUMBER 100
    - PROJECT : CONVERT STRING “10.25” TO FLOAT-NUMBER 10.25

## 17-8 VARIABLE TYPE AND USE OF typeOf, toFixed WITH parseFloat

* + FIND typeOf DIFFERENT DATA
    - NUMBER
    - STING
    - BOOLEAN
    - OBJECT
    - UNDEFINED
    - NULL
  + toFixed OPT

# MODULE 18 : SUMMARY

* + - * 1. ARRAY DATA-TYPE
        2. ARRAY METHODS
        3. CONDITIONS
        4. CONDITIONS ON ARRAY.LENGTH
        5. CONDITIONS ON ARRAY[VALUE-INDEX]
        6. OPERATORS : COMPARISON

## 18-1 Module Introduction and Variable recap

* + Recap MODULE 17

## 18-2 Declare Array, array length and array index

* + DECLARING ARRAY-DATA
  + ARRAY METHODS
    - ARRAY,LENGTH

## 18-3 Array index, get and set by index, indexOf

* + ARRAY METHODS
    - ARRAY,INDEX
      * ARRAY.indexOf(INDEX-NO)
      * ARRAY.indexOf(INDEX-NO-OUT OF-CONTEXT)
      * ARRAY[INDEX-NO] = NEW-VALUE

## 18-4 Add or remove element from array using push, pop

* + ARRAY METHODS
    - ARRAY.push(NEW-VALUE);
    - ARRAY.pop();
    - NEWARRY = ARRAY.pop();

## 18-5 Compare variables and Comparison operator

* + OPERATORS :
    - LOGICAL
    - COMPARISON

## 18-6

* + CONDITIONS
    - IF
    - IF ELSE

## 18-7

* + MULTIPLE CONDITIONS
    - AND / OR INSIDE IF

## 18-8

* + NESTED CONDITIONS
    - IF ELSE-IF ELSE
    - IF INSIDE IF

## 18-9

* + RECAP MODULE 18

# MODULE 18-5 : SUMMARY

* + - * 1. WHILE LOOP
        2. FOR LOOP
        3. FOR LOOP ON ARRAY

## 18-5-1

* + Recap MODULE 18
    - VARIABLES
      * DATA TYPES
    - ARRAY
      * ARRAY METHODS
    - CONDITION
      * IF ELSE
      * IF ELSE IF ELSE

## 18-5-2

* + WHILE LOOP
  + DEBUG LOOP WITH BREAK-POINTS IN VS CODE

## 18-5-3

* + WHILE LOOP
    - PROJECT : RUN A LOOP 1 - 10 WHERE INCREMENT STEPS 1
    - PROJECT : RUN A LOOP 1 - 100 WHERE OUTPUT WILL BE ALL EVEN NO
    - PROJECT : RUN A LOOP 1 - 100 WHERE OUTPUT WILL BE ALL ODD NO

## 18-5-4

* + FOR LOOP
    - PROJECT : RUN A LOOP 1 - 10 WHERE INCREMENT STEPS 1
    - PROJECT : RUN A LOOP 1 - 100 WHERE OUTPUT WILL BE ALL EVEN NO
    - PROJECT : RUN A LOOP 1 - 100 WHERE OUTPUT WILL BE ALL ODD NO

## 18-5-5

* + RECAP