# Step 1: Print oceanMap

### 1. Declare the oceanmap into 10 x 10 grid

-> create 2D array

-> **player 1** = user and **player 2** = computer

-> Character Array or String Array

-> we re going to store the single character

### 2. Print the \*\*\*\* Welcome to Battle Ships game \*\*\*\* message

and **Right now, sea is empty (for first print only)**

### 3. Print the column index (0-9)

->Loops using:- For / do while / while/ for each

-> Continuous numbers - index incremented

=> for loop for column index

### 4. Print the row index ( )

### 5. Repeat the step 4 for index 0 to 9

=> Nested loop - Row, Col

=> for each row

for each column

print numberRows| spaces |numberIndex

### 6. Print step 3

=> Clue to create method.

# Step 2: give Coordinates Of Player Ships (deploy player ship)

### 1 - Player Ship => represented as @

Player ships = 5

Get x co-ordinate input

Steps 2 & 3 must be executed atleast once

use do while loop for executing loop atleast once

do - while (true)

### 2. Brief the user for x co-ordinate

### 3. if x co-ordinate is between 0 and 9 goto step 4

else goto step 2 => Shouln't reprompt the message until the user enter the valid coordinate

while (0 >= x co-ordinate <=9)

### 4. Prompt Get y co-ordinate input

do

### 5. Get y co-ordinate input

### 6. if y co-ordinate is between 0 and 9 goto step 7

else goto step 5 => Shouln't reprompt the message until the user enter the valid co-ordinate

while (0 >= x co-ordinate <=9)

### 7. If the location is empty

deploy the ship

Increment the the player's ship count by 1

else

goto step 1 => Loop

### 8. Repeat the steps from 1 to 7 for 5 ships => Loop

### 9. Execute Print oceanMap method

# Step 3: enter Computer Ships coordinates (deploy computer ships )

### ->Use RANDOM for this step

# Step 4:Battle

### Player Turn

- - Missed target

! - Sunk computer's ship

x - Sunk Player's ship

### Computer Turn

! - Sunk computer's ship

x - Sunk Player's ship

- Computer Missed

# Step 5: Declare the result

### if computer ships = 0 then

Display “HURRAY! Player Won the match"

### else

Display “YOU LOOSE, Computer Won the match"