Challenge 3: Calculate Mean and Standard Deviation from Array

In this lesson, we will practice allocating and manipulating dynamic memory.

We'll cover the following

Problem statement#

In this challenge, you have to perform the following tasks:

- Use a pointer to allocate a dynamic array of size 10.
- Initialize this array with random numbers between 0 and 99.
- Then, calculate the mean and standard deviation of these numbers and print them.
- Finally, deallocate the memory used by the array.

> **Note:** You can use the `rand()` method to generate random numbers.

Coding exercise#

Implement the solution in the code playground given below. After solving, check next lesson and compare your solution.

check next lesson and compare your solution.

```
#include <iostream>
#include <cmath>
using namespace std;

int main() {
  int size = 10;

  //Declare dynamic array
  int *Array;

  //Initialize dynamic array


  //Prints dynamic array
  cout << "Elements of array: ";
  cout << endl;

  //Calculate mean and print
  float mean = 0;
  cout << "Mean: " << mean << endl;

  //Calculate standard deviation and print
  float stdDev = 0;
  cout << "Standard Deviation: " << stdDev << endl;

  // Deletes a memory allocated to dynamic array

}
```

🎉If you have solved the problem, congratulations!

In case you are stuck, let's go over the solution review in the next lesson.

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Solution Review: Delete an Element at...

Solution Review: Calculate Mean and ...