**Computing Fundamentals & Programming**

**Assignment 7**

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**Question 1**

Write a C++ program that reads 10 numbers from the user, stores them into an array.

Code:

**const int** number = 10;

**int** main() {

**int** arr[number];

**for** (**int** i = 0; i < number; i++) {

cout<<**"Enter any number: "**<<endl;

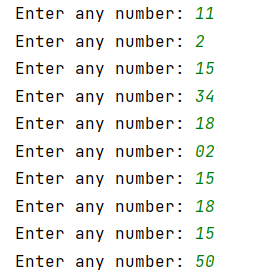
cin>>arr[i];

}

return 0;

}

Output:



**Question 2**

Prints the largest, smallest number, and the sum of all the numbers on the screen.

Example: If the User enters 11, 2, 15, 34, 18, 2, 15, 18, 15, 50 then program should print: Largest = 50, Smallest = 2 and SUM = 180

Code:

**int** largeNum(**int** arr[number]) {

**int** large = 0;

**for** (**int** i = 0; i < number; i++) {

*//for (int j = 0; j < number; j++) {*

**if** (large < arr[i]) { *//check whether the previous one is smaller than present value*

large = arr[i]; *// if previous one is smaller its mean that latter is largest*

}

*//}*

}

**return** large; *//passes the value to function*

}

**int** smallNum(**int** arr[number]) {

**int** small = 0;

**for** (**int** i = 0; i < number; i++) {

**if** (small > arr[i]) { *//check whether the previous one is larger than present value*

small = arr[i]; *// if previous one is larger then it means that latter is smallest*

}

}

**return** small; *//passes the value to function*

}

**int** sumNum(**int** arr[number]) {

**int** sum = 0; *//initiates sun to zero*

**for** (**int** i = 0; i < number; i++) {

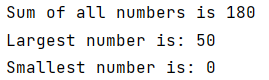
sum = sum + arr[i]; *//add the values saved in the array respectively*

}

**return** sum; *//passes the value to function*

}

Output:



**Question 3**

Print the sum of odd and even number.

Example: If the user enters 11, 2, 15, 34, 18, 2, 15, 18, 15, 50 then the program should print: Sum of even numbers = and Sum of odd numbers

Code:

**int** sumEven(**int** arr[number]) {

**int** sum = 0; *//initiates sun to zero*

**for** (**int** i = 0; i < number; i++) {

**int** even = arr[i]; *//saves the value in even*

**if** (even % 2 == 0) {

sum = sum + arr[i]; *//if the mod of even is zero then even will be added in sum.*

}

}

**return** sum; *//passes the value to function*

}

**int** sumOdd(**int** arr[number]) {

**int** sum = 0;*//initiates sun to zero*

**for** (**int** i = 0; i < number; i++) {

**int** odd = arr[i];*//saves the value in odd*

**if** (odd % 2 != 0) {

sum = sum + arr[i]; *//if the mod of odd is not zero then odd will be added in sum.*

}

}

**return** sum; *//passes the value to function*

}

Output:



**Question 4**

Print the count of numbers that are perfect squares

Example: If the user enters 11, 4, 15, 9, 18, 2, 25, 18, 15, 49 then program should print:

There are 4 perfect squares

Code:

**int** checkPerfect(**int** arr[number]) {

**int** count; *//initiates count*

**for** (**int** i = 0; i < number; i++) { *//changes the test value*

**for** (**int** j = 1; j < arr[i]; j++) *//changes the checking value by which we can determine perfect square*

**if** ((arr[i] % j == 0) && (arr[i] / j == j)) { *//if value gives the same quotient as the divider, and its*

count++; *// remainder is zero then it is perfect square and then the*

} *//count is incremented*

}

**return** count; *//passes the value to function*

}

Output:

