

TCS NQT 2025 -14th April coding questions with solution.(1st shift)

Learning With Ram

Video Solution link [Q](https://youtu.be/4pOIDbO68G0)

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Q1) You are given two integers m and n. Your task is to compute the sum of the m-th prime number to the (m + n)-th prime number, inclusive.

Input:

Two integers m and n such that $m \geq 1$ and $n \geq 0$

Output:

Print the sum of the m-th, (m+1)-th, ..., (m+n)-th prime numbers.

Example 1:

Input:

$m = 2$

$n = 2$

Output:

Sum = 15

Explanation:

2nd prime = 3

3rd prime = 5

4th prime = 7

Sum = $3 + 5 + 7 = 15$

eg-2

$n = 3$

Input:

$m = 1$

Explanation: We need the sum of 1st, 2nd, 3rd, and 4th prime numbers.

1st prime = 2

2nd prime = 3

3rd prime = 5

4th prime = 7

Sum = $2 + 3 + 5 + 7 = 17$

Code:-

```
#include <iostream>
```

```
using namespace std;

// Function to check if a number is prime
bool isPrime(int num) {
    if (num < 2) return false;
    for (int i = 2; i*i <= num; i++) {
        if (num % i == 0) return false;
    }
    return true;
}

// Function to get the nth prime number
int getNthPrime(int n) {
    int count = 0, num = 1;
    while (count < n) {
        num++;
        if (isPrime(num)) count++;
    }
    return num;
}

int main() {
    int m, n;
    cout << "Enter m and n: ";
    cin >> m >> n;

    int sum = 0;
    for (int i = m; i <= m + n; i++) {
        sum += getNthPrime(i);
    }
}
```

```
    }  
  
    cout << "Sum = " << sum << endl;  
    return 0;  
}
```

Q2) 📋 Game Rules:

The first input is an integer T , the number of times the game will be played.

For each game:

Read an integer r , the number of rows in a matrix. The number of columns is fixed at 3.

Then, read the next $r \times 3$ integers as elements of the matrix.

Players take turns filling/playing the cells. Fiet always starts first.

The player who makes the last move wins the game.

 **Input Format:**

$T \rightarrow$ Number of games

$r \rightarrow$ Number of rows (for each game)

$r \times 3$ integers \rightarrow Matrix elements for that game

(repeat for T games)

Print the name of the winner for each game:

 **Example Input:**

2

2

1 2 3

4 5 6

3

7 8 9 --- fit

10 11 12 -- pia

13 14 15 -- fit

 **Example Output:**

Pia

Fiet

Code:-

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

int main() {
    int T;
    cout << "Enter number of games: ";
    cin >> T;

    while (T--) {
        int r, value;
        const int c = 3;
        cout << "Enter number of rows for this game: ";
        cin >> r;

        int totalMoves = r * c;

        cout << "Enter the matrix values (" << r * c << " values): ";
        for (int i = 0; i < totalMoves; i++) {
            cin >> value; // Reading the matrix values
        }

        if (totalMoves % 2 == 0)
            cout << "Pia" << endl; // Even number of moves → Pia plays last
        else
            cout << "Fiet" << endl; // Odd number of moves → Fiet plays last
    }

    return 0;
}
```

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