main.cpp

Share Run

```cpp
//TEST CASE 1 SEM1//

#include <iostream>
using namespace std;

int main()
{
    float g1[8] = {10, 8, 9, 7, 9.5, 8.5, 7, 6.5};
    int c1[8] = {2, 3, 1, 2, 4, 3, 2, 1};

    float m = 0;
    int n = 0;
    float spi1 = 0;

    for (int i = 0; i < 8; ++i)
    {
        m += g1[i] * c1[i];
        n += c1[i];
    }

    spi1 = m / n;
    cout << "The Semester Performance Index (SPI) of sem1 is: " << spi1 << endl;

    return 0;
}

```

Output

Clear

```
/tmp/aZhCXXaEhm.o
The Semester Performance Index (SPI) of sem1 is: 8.38889


=== Code Execution Successful ===
```

main.cpp

Share Run

```cpp
//TEST CASE 1 SEM2//

#include <iostream>
using namespace std;

int main()
{
    float g2[8] = {9, 8, 7, 10, 9.5, 7.5, 8.5, 7};
    int c2[8] = {3, 3, 2, 1, 1, 2, 2, 3};

    float m = 0;
    int n = 0;
    float spi2 = 0;

    for (int i = 0; i < 8; ++i)
    {
        m += g2[i] * c2[i];
        n += c2[i];
    }

    spi2 = m / n;
    cout << "The Semester Performance Index (SPI) of sem2 is: " << spi2 << endl;

    return 0;
}
```

Output

Clear

```
/tmp/N8fhl2sxSs.o
The Semester Performance Index (SPI) of sem2 is: 8.08823


=== Code Execution Successful ===
```

main.cpp

Share Run

```cpp
//TEST CASE 1 CPI//

#include <iostream>
using namespace std;

int main()
{
    float spi[2] = {8.38, 8.08};
    int s = 2;

    float m = 0;
    float cpi = 0;

    for (int i = 0; i < 2; ++i)
    {
        m += spi[i];
    }

    cpi = m / s;

    cout<< "The Cumulative Performance Index (CPI) is: " << cpi << endl;

    return 0;
}
```

Output Clear

```
/tmp/IGudN4fVv7.o
The Cumulative Performance Index (CPI) is: 8.23


=== Code Execution Successful ===
```

main.cpp

Share Run

```cpp
//TEST CASE 2 SPI SEM 1//

#include <iostream>
using namespace std;

int main()
{
    float g1[8] = {9, 8, 7, 6, 5, 4, 3, 2};
    int c1[8] = {3, 3, 3, 3, 3, 3, 3, 3};
    float m = 0;
    int n = 0;
    float spi1 = 0;

    for (int i = 0; i < 8; ++i)
    {
        m += g1[i] * c1[i];
        n += c1[i];
    }

    spi1 = m / n;
    cout << "The Semester Performance Index (SPI) of sem1 is: " << spi1 << endl;

    return 0;
}
```

Output

Clear

```
/tmp/7Pq7Nc1yBX.o
The Semester Performance Index (SPI) of sem1 is: 5.5


=== Code Execution Successful ===
```

main.cpp

Share Run

```cpp
//TEST CASE 2 CPI//

#include <iostream>
using namespace std;

int main()
{
    float spi[2] = {5.5};
    int s = 1;

    float m = 0;
    float cpi = 0;

    for (int i = 0; i < 2; ++i)
    {
        m += spi[i];
    }

    cpi = m / s;

    cout<< "The Cumulative Performance Index (CPI) is: " << cpi << endl;

    return 0;
}
```

Output Clear

```
/tmp/gz29UZYGoE.o
The Cumulative Performance Index (CPI) is: 5.5


=== Code Execution Successful ===
```

main.cpp

Share Run

```cpp
//TEST CASE 3 SPI SEM 1//

#include <iostream>
using namespace std;

int main()
{
    float g1[8] = {8, 7, 6, 5, 4, 3, 2, 1};
    int c1[8] = {2, 2, 2, 2, 2, 2, 2, 2};
    float m = 0;
    int n = 0;
    float spi1 = 0;

    for (int i = 0; i < 8; ++i)
    {
        m += g1[i] * c1[i];
        n += c1[i];
    }

    spi1 = m / n;
    cout << "The Semester Performance Index (SPI) of sem1 is: " << spi1 << endl;

    return 0;
}

```

Output

Clear

```
/tmp/DwHtm2umz7.o
The Semester Performance Index (SPI) of sem1 is: 4.5


=== Code Execution Successful ===
```

main.cpp

Share Run

```cpp
//TEST CASE 3 SPI SEM 2//

#include <iostream>
using namespace std;

int main()
{
    float g2[8] = {9, 8, 7, 6, 5, 4, 3, 2};
    int c2[8] = {1, 1, 1, 1, 1, 1, 1, 1};
    float m = 0;
    int n = 0;
    float spi2 = 0;

    for (int i = 0; i < 8; ++i)
    {
        m += g2[i] * c2[i];
        n += c2[i];
    }

    spi2 = m / n;
    cout << "The Semester Performance Index (SPI) of sem2 is: " << spi2 << endl;

    return 0;
}
```

Output

Clear

```
/tmp/3QTIab3OuR.o
The Semester Performance Index (SPI) of sem2 is: 5.5


=== Code Execution Successful ===
```

main.cpp

Share Run

```cpp
//TEST CASE 3 CPI//

#include <iostream>
using namespace std;

int main()
{
    float spi[2] = {4.5, 5.5};
    int s = 2;

    float m = 0;
    float cpi = 0;

    for (int i = 0; i < 2; ++i)
    {
        m += spi[i];
    }

    cpi = m / s;

    cout<< "The Cumulative Performance Index (CPI) is: " << cpi << endl;

    return 0;
}
```

Output Clear

```
/tmp/Qu6Mgc8eUz.o
The Cumulative Performance Index (CPI) is: 5


=== Code Execution Successful ===
```

main.cpp

Share Run

```cpp
//TEST CASE 4 SPI and CPI SEM 1//

#include <iostream>
using namespace std;

int main()
{
    float g1[8] = {9, 8, 7, 6, 5, 4, 3, 2};
    int c1[8] = {0, 0, 0, 0, 0, 0, 0, 0};
    float m = 0;
    int n = 0;
    float spi1 = 0;

    for (int i = 0; i < 8; ++i)
    {
        m += g1[i] * c1[i];
        n += c1[i];
    }

    spi1 = m / n;

    if(spi1>0)
    {
    cout << "The Semester Performance Index (SPI) of sem1 is: " << spi1 << endl;
    }
    else
    {
        cout<<"error in finding both spi and cpi";
    }

    return 0;
}
```

Output

Clear

```
/tmp/N5iNobPjoR.o
error in finding both spi and cpi

=== Code Execution Successful ===
```

main.cpp

Share Run

```cpp
//TEST CASE 5 SPI and CPI SEM 1//

#include <iostream>
using namespace std;

int main()
{
    float g1[8] = {-9, -8, -7, -6, -5, -4, -3, -2};
    int c1[8] = {1, 1, 1, 1, 1, 1, 1, 1};
    float m = 0;
    int n = 0;
    float spi1 = 0;

    for (int i = 0; i < 8; ++i)
    {
        m += g1[i] * c1[i];
        n += c1[i];
    }

    spi1 = m / n;

    if(spi1>0)
    {
    cout << "The Semester Performance Index (SPI) of sem1 is: " << spi1 << endl;
    }
    else
    {
        cout<<"error in finding both spi and cpi";
    }

    return 0;
}
```

Output

Clear

```
/tmp/t36u0Re73s.o
error in finding both spi and cpi

=== Code Execution Successful ===
```