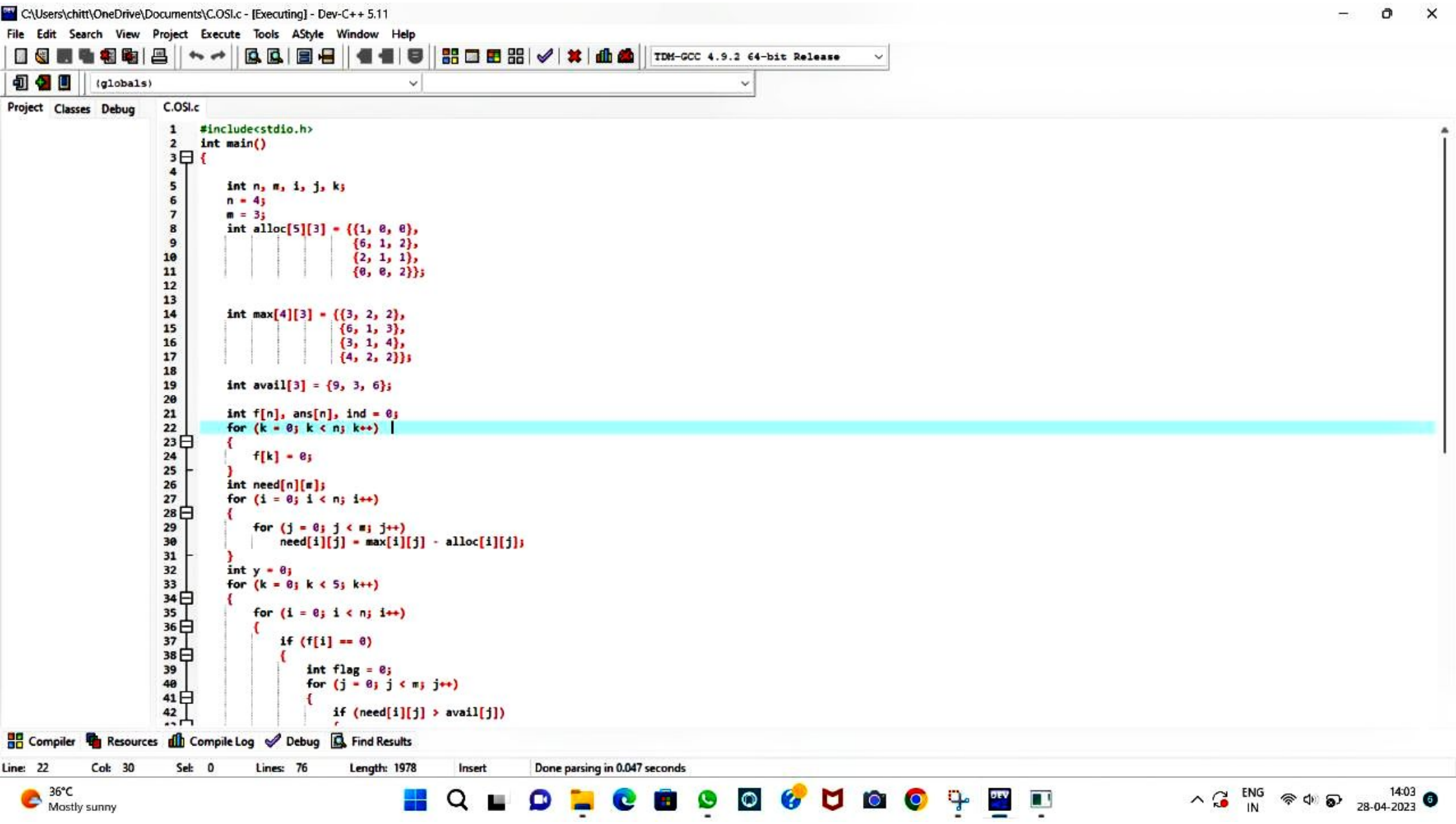
C:\Users\chitt\OneDrive\Documents\C.OSI.c - [Executing] - Dev-C++ 5.11
File Edit Search View Project Execute Tools AStyle Window Help
TDM-GCC 4.9.2 64-bit Release
(globals)
Project Classes Debug
C.OSI.c
#include<stdio.h>
int main()
{
int n, m, i, j, k;
n = 4;
m = 3;
int alloc[5][3] = {{1, 0, 0},
{6, 1, 2},
{2, 1, 1},
{0, 0, 2}};
int max[4][3] = {{3, 2, 2},
{6, 1, 3},
{3, 1, 4},
{4, 2, 2}};
int avail[3] = {9, 3, 6};
int f[n], ans[n], ind = 0;
for (k = 0; k < n; k++)
{
f[k] = 0;
}
int need[n][m];
for (i = 0; i < n; i++)
{
for (j = 0; j < m; j++)
need[i][j] = max[i][j] - alloc[i][j];
}
int y = 0;
for (k = 0; k < 5; k++)
{
for (i = 0; i < n; i++)
{
if (f[i] == 0)
{
int flag = 0;
for (j = 0; j < m; j++)
{
if (need[i][j] > avail[j])
Compiler Resources Compile Log Debug Find Results
Line: 22 Col: 30 Sel: 0 Lines: 76 Length: 1978 Insert Done parsing in 0.047 seconds
36°C
Mostly sunny
ENG
IN
14:03
28-04-2023

C:\Users\chitt\OneDrive\Documents\C.OSI.c - [Executing] - Dev-C++ 5.11

File Edit Search View Project Execute Tools AStyle Window Help

TDM-GCC 4.9.2 64-bit Release

(globals)

Project Classes Debug

C.OSI.c

```
        for (i = 0; i < n; i++)
        {
            if (f[i] == 0)
            {
                int flag = 0;
                for (j = 0; j < m; j++)
                {
                    if (need[i][j] > avail[j])
                    {
                        flag = 1;
                        break;
                    }
                }
                if (flag == 0)
                {
                    ans[ind++] = i;
                    for (y = 0; y < m; y++)
                        avail[y] += alloc[i][y];
                    f[i] = 1;
                }
            }
        }
    }
    int flag = 1;
    for (i = 0; i < n; i++)
    {
        if (f[i] == 0)
        {
            flag = 0;
            printf("The following system is not safe");
            break;
        }
    }
    if (flag == 1)
    {
        printf("Following is the SAFE Sequence\n");
        for (i = 0; i < n - 1; i++)
            printf(" P%d ->", ans[i]);
        printf(" P%d", ans[n - 1]);
    }
    return (0);
}
```

C:\Users\chitt\OneDrive\Documents\C.OSI.exe

```
Following is the SAFE Sequence
 P0  -> P1  -> P2  -> P3
--------------------------------
Process exited after 0.07833 seconds with return value 0
Press any key to continue . . .
```

Compiler Resources Compile Log Debug Find Results

Line: 22 Col: 30 Sel: 0 Lines: 76 Length: 1978 Insert Done parsing in 0.047 seconds

36°C Mostly sunny

ENG IN 14:03 28-04-2023