

```
// Created by Angel on 11/6/2024.

#include <iostream>
#include <windows.h>
#include <time.h>

using namespace std;

int suma = 0, promedio = 0;
float group[10];

// void fillArray() {
//     cout<< "Ingrese los datos que desea almacenar: \n";
//     //
//     for(int i = 0; i < 10; i++) {
//         group[i] = 0;
//         cin>>group[i];
//     }
// }

void fillArray() {
    cout<< "Generando numeros \n";
    system("pause");

    for(int i = 0; i < 10; i++) {
        group[i] = 1 + rand() % 11;
    }
}

void printArray() {
    cout<< "Los datos almacenados son: \n";
    for(int i = 0; i < 10; i++) {
        cout<<group[i]<<"\t";
    }
    cout<<endl;
}

void calcPromedio()
{
    for(int i = 0; i < 10 ; i++){
        suma = suma + group[i];
    }

    promedio = suma/10;
    cout<< "El promedio de los datos es: "<< promedio;
}
```

```
void gotoxy(int posX, int posY)
{
    HANDLE hConsoleOutput;
    COORD coord;
    hConsoleOutput = GetStdHandle (STD_OUTPUT_HANDLE);
    coord.X = posX;
    coord.Y = posY;
    SetConsoleCursorPosition (hConsoleOutput, coord);
}

void SetColor(int color)
{
    WORD wColor;
    HANDLE hStdOut = GetStdHandle(STD_OUTPUT_HANDLE);
    CONSOLE_SCREEN_BUFFER_INFO csbi;
    if(GetConsoleScreenBufferInfo(hStdOut, &csbi))
    {
        wColor = (csbi.wAttributes & 0xF0) + (color & 0x0F);
        SetConsoleTextAttribute(hStdOut, wColor);
    }
}

int main()
{
    srand(time(NULL));
    fillArray();
    printArray();
    calcPromedio();

    return 0;
}
```

The screenshot shows a Visual Studio Code editor window with the following components:

- Project Files:** A sidebar on the left showing the project structure. The path is `C:\Users\Angel\OneDrive\Escritorio\College\Fundamentos de programacion\FDP-con-C\cmake-build-debug`. The file `Arreglos.cpp` is selected.
- Code Editor:** The main area shows the `Arreglos.cpp` file. The code is as follows:

```
22 void fillArray() {  
26     for(int i = 0; i < 10; i++) {  
27         group[i] = 5 + rand() % 5;  
28     }  
29 }  
30
```
- Run:** A tab labeled `arreglo` is active, showing the execution output.

```
"C:\Users\Angel\OneDrive\Escritorio\College\Fundamentos de programacion\FDP-con-C\cmake-build-debug\arreglo.exe"  
Generando numeros  
Press any key to continue . . .  
  
Los datos almacenados son:  
8    7    7    7    8    5    7    8    9    6  
El promedio de los datos es: 7  
Process finished with exit code 0
```
- Bottom Bar:** The status bar at the bottom shows the file path `FDP-con-C > College > Arreglos > Arreglos.cpp`, the cursor position `27:28`, the encoding `CRLF`, the file encoding `UTF-8`, the formatter `clang-tidy`, the active file `FDP_con_C`, the theme `Kanagawa Theme`, the tab `1 space*`, the language `C++`, the debug mode `arreglo | Debug`, and a refresh icon.