//Task 1

#include <iostream>

using namespace std;

int main() {

cout << "Student Information:"<<endl;

cout << "Name: Mustafa Ahsan"<<endl;

cout << "Roll Number: 23i-0549"<<endl;

cout << "CGPA: 3.75"<<endl;

return 0;

}

//Task 2

#include <iostream>

using namespace std;

int main() {

cout << "1"<<endl;

cout << "1 2 1"<<endl;

cout << "1 2 3 2 1"<<endl;

cout << "1 2 3 4 3 2 1"<<endl;

cout << "1 2 3 4 5 4 3 2 1"<<endl;

cout << " "<<endl;

cout << "\*\*\*\*\*\*\*\*1\*\*\*\*\*\*\*\*"<<endl;

cout << "\*\*\*\*\*\*\*2\*2\*\*\*\*\*\*\*"<<endl;

cout << "\*\*\*\*\*\*3\*3\*3\*\*\*\*\*\*"<<endl;

cout << "\*\*\*\*\*4\*4\*4\*4\*\*\*\*\*"<<endl;

cout << "\*\*\*\*5\*5\*5\*5\*5\*\*\*\*"<<endl;

cout << " "<<endl;

cout << " 1 "<<endl;

cout << " 1 2 1 "<<endl;

cout << " 1 2 3 2 1 "<<endl;

cout << " 1 2 3 4 3 2 1 "<<endl;

cout << "1 2 3 4 5 4 3 2 1"<<endl;

cout << " "<<endl;

return 0;

}

//Task 3

#include <iostream>

using namespace std;

int main() {

cout<<"Task 3"<<endl;

cout << "\* \* \* \* \*\*\*\*\*\*\* \*\*\*\*\*\*\*\*\* \* \*\*\*\*\*\* \*"<<endl;

cout << "\* \* \* \* \* \* \* \* \* \* \* \* \*"<<endl;

cout << "\* \* \* \* \* \* \*\*\*\*\*\*\* \* \*\*\*\*\* \*\*\*\*\*\* \*\*\*\*\*"<<endl;

cout << "\* \* \* \* \* \* \* \* \* \* \* \* \*"<<endl;

cout << "\* \* \* \*\*\*\*\*\*\* \*\*\*\*\*\*\* \* \* \* \* \* \*"<<endl;

return 0;

}

//Task 4

#include <iostream>

using namespace std;

int main() {

cout<<"Task 4"<<endl;

cout <<" 1 "<<endl;

cout << " 2 2 2 "<<endl;

cout << " 3 3 3 3 3 "<<endl;

cout << "4 4 4 4 4 4 4"<<endl;

return 0;

}







