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**American International University – Bangladesh**

**CSC 2211: Algorithms [F] Final Lab Exam**

1. Write a warm up code to select your problem set.

*#include<bits/stdc++.h>*

*using namespace std;*

*int main(){*

*int middleId = 1997;*

*cout<<(middleId%3+1)<<endl;*

*return 0;*

*}*

1. Generate a unweighted graph with 100 vertices and 300 edges and apply DFS, BFS algorithm and find the time complexity.
2. Generate a weighted graph with 100 vertices and 300 edges, weight between -10 to 10 range and apply Dijkstra and Bellman Ford algorithm and find the time complexity.