Login to matrix and create a file called “quiz4.txt”.

Answer the following questions and when done enter the following command:

~fardad.soleimanloo/submit oopq4 <ENTER>

1. What is a Constructor and how and when it is called?
2. What is a destructor and how and when it is called?
3. What safe empty state?
4. Having the following class fully implemented: (you can copy the code for mark from mark.cpp [HERE](https://github.com/Seneca-244200/OOP-SAB-Notes/blob/master/SBBL/05-Feb06/mark.cpp))  
   Add Two constructors:   
   A- No argument that puts the Mark in a safe empty state (It is your call to decide what is a safe empty state for a Mark)  
   B- A 3 argument constructor that sets a mark.  
   C- Add a method calls isEmpty() that returns a Boolean. It returns true if the Mark is in a safe empty state.

class Mark {

private:

char m\_grade[3];

double m\_points;

int m\_maxPoints;

int m\_displayType;

void setGrade();

public:

double points()const;

void points(double value);

int maxPoints()const;

void maxPoints(int value);

int weightedMark()const;

double gpa()const;

const char\* grade()const;

void display()const;

void displayType(int dType);

1. };