**Assignment 007: Vector**

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Given the declaration of class template Vetor below, write the bodies of the functions, and a main() to test all the facilities Vector provides.

class IndexOutofBounds {};

template <class T>

class Vector {

public:

Vector(); // create an empty vector

Vector(int size); // create a vector of size elements

Vector(const Vector& r); // copy ctor

virtual ~Vector();

T& operator[](int index) : throw(IndexOutofBounds);

// return the specified element, throws exception when index <0 or >=m\_nSize

int size(); // return the size of the vector

int inflate(int addSize); // expand the storage to m\_nSize+addSize, return the new size

private:

T \*m\_pElements;

int m\_nSize;

};