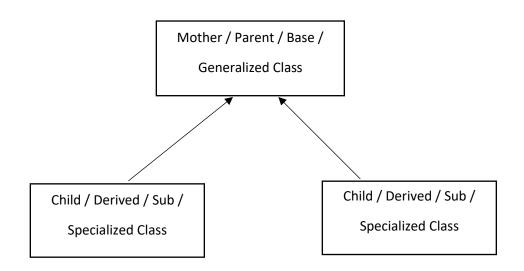
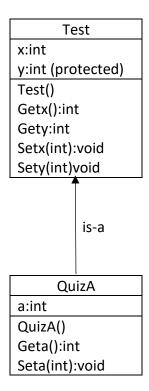
## ITEC243 – Lecture Session – (29-APR-2020) Inheritance (is-a) Relationship



Private, Protected, Public relationships between the mother and child classes may be formed.

"protected" data members: they are like private data members. Only the sub classes of base class may access them.



//base class	//sub class	//sub class	//sub class
class test{	class quizA : private	class quizA :	class quizA : public
private:	test	protected test	test
int x;	{	{	{
protected:	private:	private:	private:
int y;	int a;	int a;	int a;
public:	public:	public:	public:
test();	quizA();	quizA();	quizA();
int getx();	int geta();	int geta();	int geta();
int gety();	void seta(int);	void seta(int);	<pre>void seta(int);</pre>
void setx(int);	}	}	}
void sety(iny);			
};			

## How members of the base class appear in the derived (sub) class???

If is-a relationship is "private"		
private	<ul> <li>private: private data members of the base class are inaccessible.</li> <li>protected: protected data members of the base class become private members of the derived class.</li> <li>public: public data members of the base class become private members of the derived class.</li> </ul>	
protected	<ul> <li>private: private data members of the base class are inaccessible.</li> <li>protected: protected data members of the base class become protected</li> <li>members of the derived class.</li> <li>public: public data members of the base class become protected members of</li> <li>the derived class.</li> </ul>	
public	<ul> <li>private: private data members of the base class are inaccessible.</li> <li>protected: protected data members of the base class become protected</li> <li>members of the derived class.</li> <li>public: public data members of the base class become public members of the derived class.</li> </ul>	

How about constructor/destructor? Are they accessed by sub-classes???