Programming in Java

(a) What is meant by a *generic* in the context of Java? Explain the main purpose of generics and the most important syntax associated with them. [3 marks]

(b) Explain how any program written using generics could be re-written to avoid them. Give a fragment of code illustrating the conversions needed to achieve this. Discuss why many people will view the version that does use generics as displaying better style and robustness. [4 marks]

(c) One of your fellow students puts forward the proposition “String is a sub-class of Object, therefore Vector<Object> is a sub-class of Vector<String>”. Discuss. [3 marks]