2000 Paper 1 Question 3

Operating Systems

Operating systems need to be able to prevent applications from crashing or locking up the system, or from interfering with other applications. Which *three* kinds of hardware support do we require to accomplish this? Justify your answer. [6 marks]

How do applications request that the operating system performs tasks on their behalf? [2 marks]

What could we do if we did not have the requisite hardware support? [2 marks]