

9 Each employee in a finance company has a computer and an electronic account.

(a) Each computer has an operating system. One function of the operating system is to manage memory.

Describe the role of the operating system in managing memory.

.....  
.....  
.....  
.....  
.....  
..... [3]

(b) The finance company is concerned that a hacker may perform a brute-force attack to gain access to an employee's account.

(i) Describe how the hacker would perform the brute-force attack.

.....  
.....  
.....  
..... [2]

(ii) Give **three** cyber security solutions that could be used to help prevent a brute-force attack from being successful.

1 .....  
2 .....  
3 ..... [3]

(c) The company uses a digital currency to purchase a new car.

(i) State what is meant by a digital currency.

.....  
..... [1]

(ii) The digital currency uses a process that involves a digital ledger. The ledger has time stamped transactions that cannot be altered.

Give the name of this process.

..... [1]