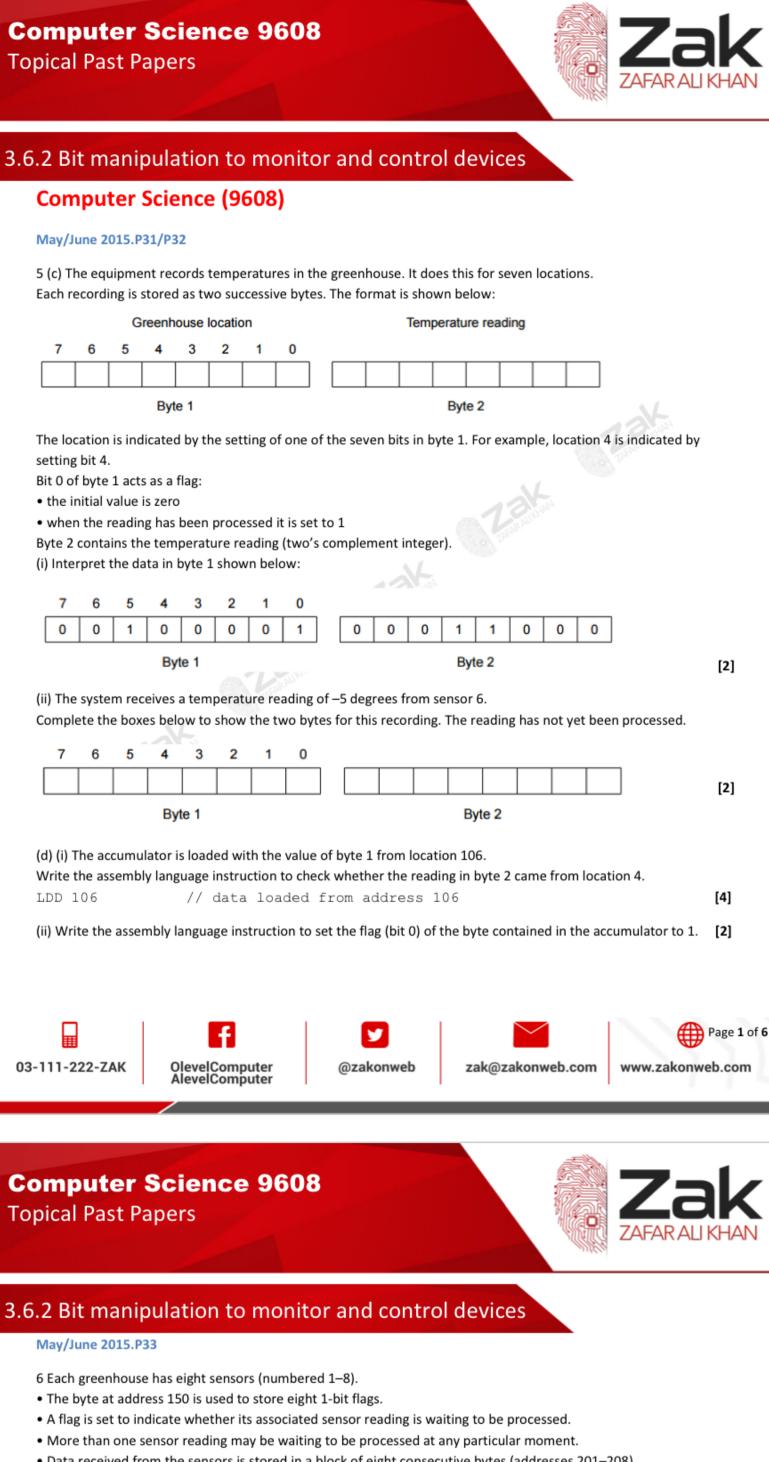
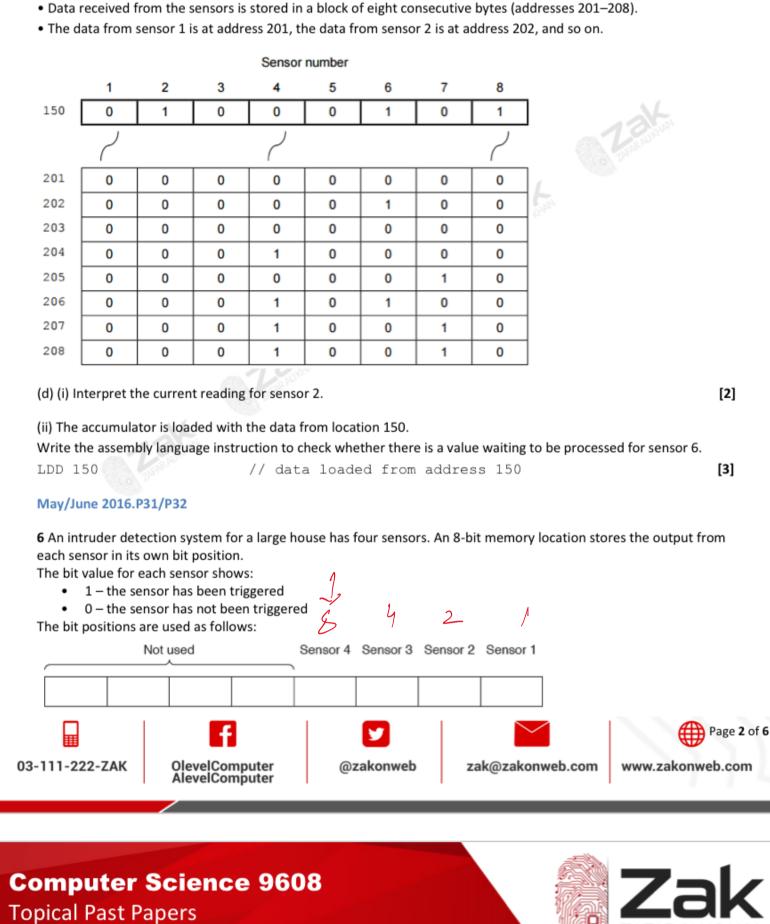
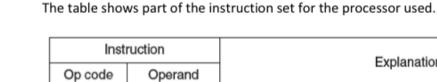


manipulati...









<address>

<address>

<register>

<address>

LDD

STO

ADD

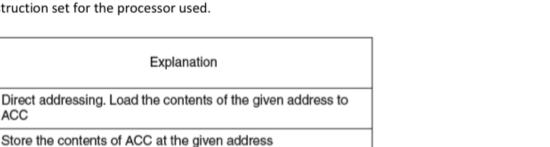
03-111-222-ZAK

Topical Past Papers

3.6.2 Bit manipulation to monitor and control devices

The output from the intruder detection system is a loud alarm.

ACC



Page 3 of 6

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Bitwise AND operation of the contents of ACC with the <address> AND contents of <address> Compare the contents of ACC with the number n CMP #n <address> Jump to the given address Following a compare instruction, jump to <address> if the <address> JPE compare was True

The intruder system is set up so that the alarm will only sound if two or more sensors have been triggered.

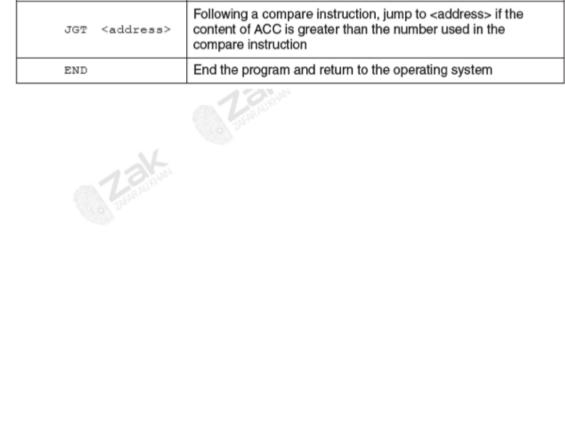
Store the contents of ACC at the given address

Add 1 to the contents of the register (ACC or IX)

Explanation

Add the contents of the given address to the contents of ACC

An assembly language program has been written to process the contents of the memory location.



OlevelComputer

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3.6.2 Bit manipulation to monitor and control devices

Computer Science 9608

NEIF

ZERO:

CMP

JPE

LDD

INC

STO

LDD

CMP

JPE

ADD

ZERO

COUNT

COUNT

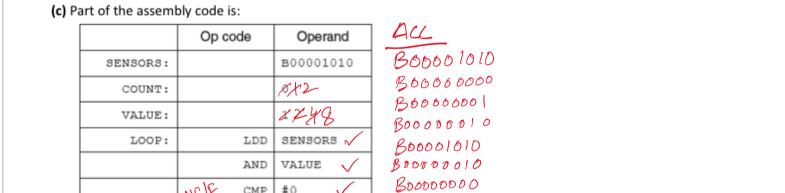
VALUE

EXIT

VALUE

VALUE

ACC



BOODDODO1

B00000010

800000100 B00001010

B000000000

B00000100

B0000 1000

800001010

800001000

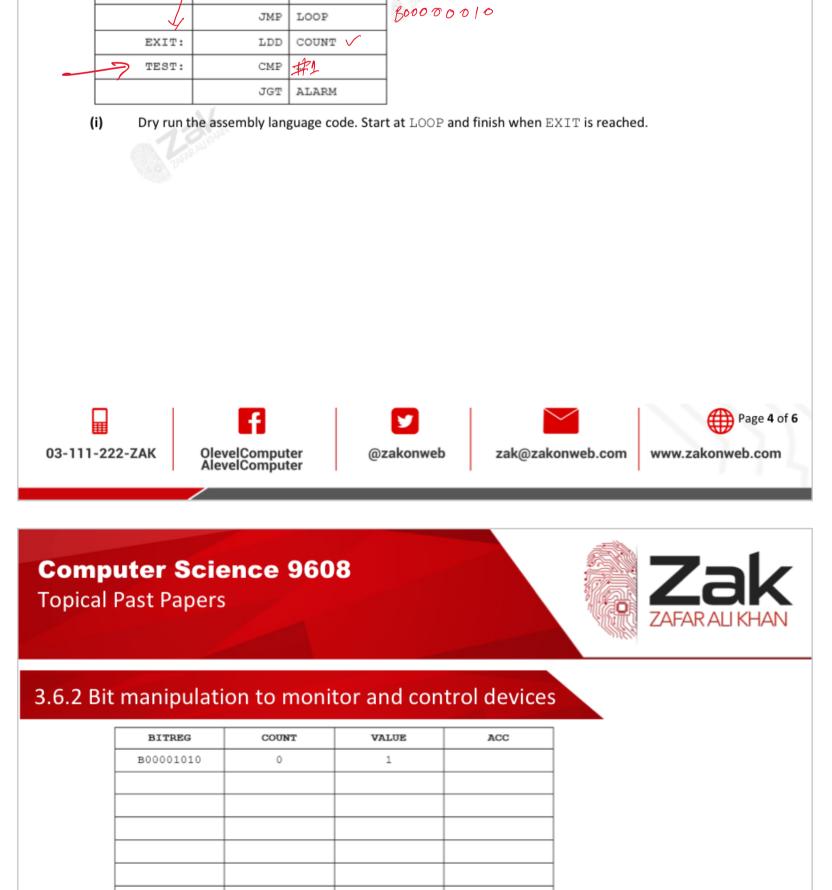
B00000001

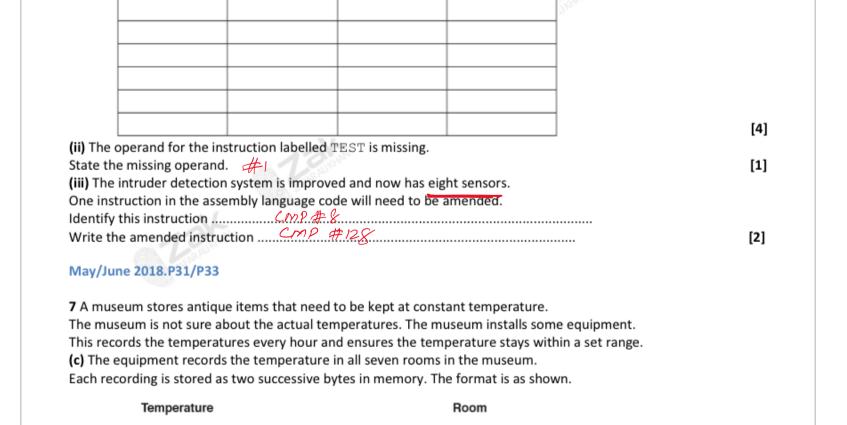
1200000000

B0000 1000

@zakonweb

zak@zakonweb.com





Byte 2



The room is indicated by the setting of one of the bits in Byte 2 to 1. For example, room 7 is indicated by setting bit 7

Byte 1

to 1.

Bit 0 of Byte 2 is a flag:

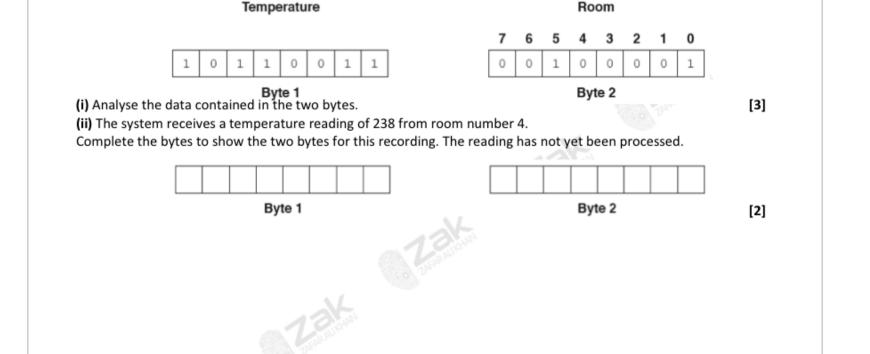
The flag's initial value is zero.

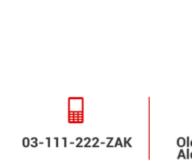
One reading returns the following binary data.

,omputer AlevelComputer

When the reading has been processed, the flag's value is set to 1.

Byte 1 contains the temperature reading as an unsigned integer.











Page 5 of 6