

Ali has created a poster using bitmapped graphic software. Describe how a bitmapped graphic is stored.(2)

The table shows types of computer memory listed in descending order of speed of access, (fastest first). Identify the two missing types. (2)

(1)	
(2)	Cache
(3)	
(4)	Backing store

Name one graphical design notation. (1)

State what is meant by a boolean variable (1)

All processors contain an ALU and a control unit.

State one logic operation performed by the ALU. (1)

Describe the purpose of the control unit (1)

Martin is a systems analyst. He has just been given a new project to work on.

(i) Explain why Martin will interview the client during the analysis stage. (1)

Over the summer, a garden centre has been running a “tallest sunflower” competition. Entrants have completed an online entry form to provide their name and the height of their sunflower. These have been collated into two lists. Samples from these lists are shown below.

<b>Name of entrant</b>
Eildih Brown
Helen Atkins
Mark Ames
Jenna Wylie

<b>Height of sunflower (metres)</b>
2.15
1.79
2.32
1.41

State the data structure and data type used to store the list of heights. (2)

Using pseudocode, design an algorithm to find and display the name of the person growing the tallest sunflower. (6)

The garden centre wants to give a consolation prize to the grower of the shortest sunflower. A number of changes need to be made to the pseudocode you wrote in the previous question.

(i) State one change that you would make to your pseudocode from part (1)

(ii) Explain why this change is necessary. (1)

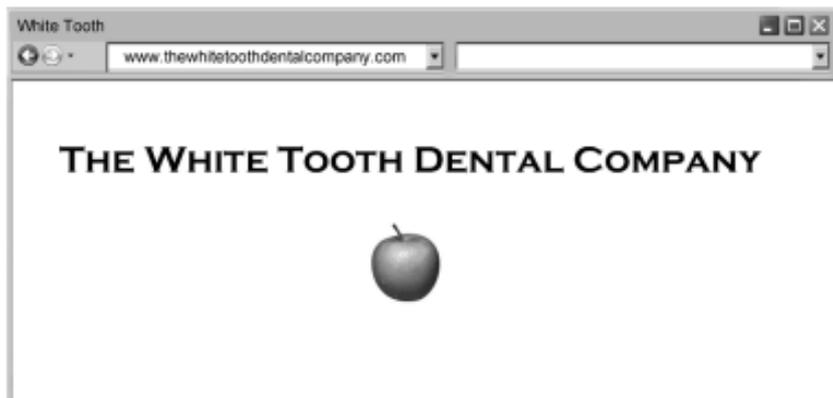
A travel agent uses a suite of software to help advertise holidays and make bookings. Part of the pseudocode that was written for the software is:

```
if cost per person is less than 500
    set band to 'cheap'
end if
if cost per person is greater than or equal to 500 AND cost per person is less than 2000
    set band to 'medium'
end if
if cost per person is greater than or equal to 2000
    set band to 'expensive'
end if
```

When the above is implemented as a subroutine, state whether the variable "cost per person" would be passed by reference or value. Justify your answer. (2)

Explain the term function. (2)

A website is being created for the dentist using HTML as shown below.



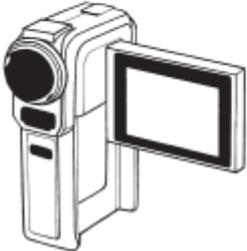
Write the HTML code for the title tag of this webpage. (2)

The website is published on the Internet. However, the dentist realises that search engines are not finding his website.

- (i) State an additional element that should be included in the HTML code in order to help a search engine find the website. (1)
- (ii) Name the section of the HTML code in which this element should be placed. (1)

EasyVid manufactures video cameras. The EasyVid Super4 digital video camera will be a new digital video camera designed to replace the current EasyVid Power3 digital camera.

	<p style="text-align: center;"><b>EasyVid Power3</b></p> <p>4.1 megapixels Bluetooth &amp; Firewire enabled 40 Gb hard disk Video editing software supplied</p>
---	---

	<p style="text-align: center;"><b>EasyVid Super4</b></p> <p>12 megapixels Bluetooth &amp; USB 3.0 enabled Built-in hardware codecs Built-in 3 in 1 card reader Video editing software supplied</p>
--	--

The EasyVid Super4 has no hard disk. Explain why using removable solid state storage would extend battery life.