



Is an array a variable or a data structure? Explain your answer.	What is the file size (in bytes) of a 4 bit image with dimensions 20x20?	How many characters are stored in the standard ASCII set?
What is the name of a subroutine that returns a value back to the main program?	How many colours can a 4 bit image hold?	What does IDE stand for?



<p>Is an array a variable or a data structure? Explain your answer.</p> <p>An array is a data structure because it can hold multiple data items under one identifier (name).</p>	<p>What is the file size (in bytes) of a 4 bit image with dimensions 20x20?</p> <p>200 Bytes</p> <p>If the dimensions are 20×20, that means that the image will have 400 pixels (20 multiplied by 20). As it is a 4 bit image, each pixel will be represented by a number 4 bits in length. This means that the file will have 1600 bits of data (400 x 4). To convert bits into bytes we simply need to see how many sets of 8 bits the number contains so we divide by 8. 1600 bits / 8 = 200 bytes. The image will therefore be 200 bytes in size.</p>	<p>How many characters are stored in the standard ASCII set?</p> <p>The standard ASCII set just contains 128 characters, which can be represented in 7 bits.</p>
<p>What is the name of a subroutine that returns a value back to the main program?</p> <p>Function</p>	<p>How many colours can a 4 bit image hold?</p> <p>16 Colours</p>	<p>What does IDE stand for?</p> <p>Integrated Development Environment</p>