Q.1

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| **Opcode (hex)** | **Opcode name** | **Explanation** | **Example** |
| 00 | nop | No operation | 0000 - nop |
| 01 | move vx,vy | Moves the content of vy into vx. Both registers must be in the first 256 register range. | 0110 - move v0, v1 Moves v1 into v0. |
| 02 | move/from16 vx,vy | Moves the content of vy into vx. vy may be in the 64k register range while vx is one of the first 256 registers. | 0200 1900 - move/from16 v0, v25 Moves v25 into v0. |
| 13 | const/16 vx,lit16 | Puts the 16 bit constant into vx | 1300 0A00 - const/16 v0, #int 10 Puts the literal constant of 10 into v0. |
| 0F | return vx | Return with vx return value | 0F00 - return v0 |
| 1D | monitor-enter vx | Obtains the monitor of the object referenced by vx. | .1D03 - monitor-enter v3 Obtains the monitor of the object referenced by v3. |

Q.2

Cloud computing, allows you to store your files and folders in a “cloud” area on the Internet, allowing you access to all of your files and folders wherever you are in the world – but you do need a physical device with Internet access to access it.

Mobile computing is taking a physical device with you. This could be a laptop or a mobile phone or some device which enables you to telework – working wherever you go because of the small size of the device you’re using.

Cloud computing - You can have all your files synchronised between devices so wherever you go, you’ll always have access to your files, but the technology doesn’t fully exist yet. It’s getting there, but it’s slow and temperamental, difficult to use and often the average user gets confused as to where the files are actually stored and/or where else they are stored. Even though you don’t need to carry round a laptop with you, you still need some physical device to access your service which almost defeats the point anyway. Having everything in your very own secure cloud so you can access anything anywhere is put back by the fact you have to find a computer to use anyway.

Mobile computing - The size of the mobile devices, keypad size and limited battery power make mobile computing not always feasible. Physical reconfiguration of the network because of moving between base stations, limited processing power, limited transmission power and low bandwidth also add to the disadvantages.

Q.3

**Context awareness** is a property of [mobile devices](http://en.wikipedia.org/wiki/Mobile_device) that is defined complementary to l[ocation awareness](http://en.wikipedia.org/wiki/Location_awareness). Whereas location may determine how certain processes in a device operate, context may be applied more flexibly with mobile users, especially with users of smartphones

Context-aware mobile  agents are a best suited host implementing any context-aware applications. Modern integrated voice and data communications equips the hospital staff with smart phones to communicate vocally with each other, but preferably to look up the next task to be executed and to capture the next report to be noted.