**Name : Hussein Ahmed Abd elhameed**

**Section : 3**

|  |  |
| --- | --- |
| PC | 300 |
| AC | 0003 |
| IR | 1940 |

1:

**Load**



**Add**

|  |  |
| --- | --- |
| PC | 301 |
| AC | 0005 |
| IR | 5941 |



**Store**

|  |  |
| --- | --- |
| Memory | |
| 300 | 1940 |
| 301 | 5941 |
| 302 | 2941 |
| 940  941 | 0003  0005 |

|  |  |
| --- | --- |
| PC | 302 |
| AC | 0005 |
| IR | 2941 |

**2:**

**Load**

|  |  |
| --- | --- |
| Memory | |
| 300 | 550 |
| 301 | 551 |
| 302 | 600 |
| 550  551 | 0003  0004 |

|  |  |
| --- | --- |
| PC | 300 |
| AC | 0003 |
| IR | 550 |

**Add**

|  |  |
| --- | --- |
| Memory | |
| 300 | 550 |
| 301 | 551 |
| 302 | 600 |
| 550  551 | 0003  0004 |

|  |  |
| --- | --- |
| PC | 301 |
| AC | 0007 |
| IR | 551 |

**Store**

|  |  |
| --- | --- |
| Memory | |
| 300 | 550 |
| 301 | 551 |
| 302 | 600 |
| 550  551 | 0003  0004 |

|  |  |
| --- | --- |
| PC | 302 |
| AC | 0007 |
| IR | 600 |

|  |  |
| --- | --- |
| Memory | |
| 300 | 550 |
| 301 | 551 |
| 302 | 600 |
| 550  551 | 0003  0007 |

|  |  |
| --- | --- |
| PC | 303 |
| AC | 0007 |
| IR | 600 |

|  |  |
| --- | --- |
| Memory | |
| 300 | 3005 |
| 301 | 5940 |
| 302 | 7006 |
| 940 | 0002 |

|  |  |
| --- | --- |
| PC | 300 |
| AC | 0003 |
| IR | 3005 |

|  |  |
| --- | --- |
| Memory | |
| 300 | 3005 |
| 301 | 5940 |
| 302 | 7006 |
| 940 | 0002 |

|  |  |
| --- | --- |
| PC | 301 |
| AC | 0005 |
| IR | 5940 |

|  |  |
| --- | --- |
| Memory | |
| 300 | 3005 |
| 301 | 5940 |
| 302 | 7006 |
| 940 | 0002 |

|  |  |
| --- | --- |
| PC | 302 |
| AC |  |
| IR | 7006 |

3:

|  |  |
| --- | --- |
| 300 | 3005 |
| 301 | 5940 |
| 302 | 7006 |
| 940 | 0002 |
| 941 |  |

We will assume that the memory (contents in hex) as the previous table:  
300: 3005; 301: 5940; 302: 7006  
Therefore, the steps will be as the following:  
Step 1: 3005 → IR  
Step 2: 3 → AC  
Step 3: 5940 → IR  
Step 4: 3 + 2 = 5 → AC  
Step 5: 7006 → IR  
Step 6: AC → Device 6