Practical 1 :

**Exercise 1 :** Multiply 68 x 139

|  |  |
| --- | --- |
| Half (Throw away remainder) | Double |
| 68 | 139 |
| 34 | 278 |
| 17 | 558 |
| 8 | 1112 |
| 4 | 2224 |
| 2 | 4448 |
| 1 | 8896 |
|  |  |
| Total | 9452 |

**Exercise 2 :** Counting Instructions

|  |  |
| --- | --- |
| ArrayMax function | Finds the biggest integer in an array |
| Input: an array A of N integers |  |
| Output: maximum element of A |  |
| arrayMax(A,n) { |  |
| currentMax = A[0] | 2 |
| For(i=0; i<A.length; i++){ | 4N – 1 |
| If (A[i] > currentMax) then | 2(N – 1) |
| currentMax = A[i] | 2(N – 1) |
| } |  |
| Return currentMax | 1 |
| End function |  |
|  |  |
| Total : T(N) | 8N - 2 |
|  |  |