|  |  |
| --- | --- |
| **Half (throw away remainder)** | **Double** |
| 68 | 139 |
| 34 | 278 |
| 17 | 556 |
| 8 | 1112 |
| 4 | 2224 |
| 2 | 4448 |
| 1 | 8896 |
|  |  |
| Total | 8896 + 556 = 9452 |

|  |  |
| --- | --- |
| **arrayMax function** | Finds the biggest integer in an array |
| **Input:** an array A of N integers |  |
| **Output:** maximum element of A |  |
| arrayMax(A, n) { | 0 |
| currentMax = A[0] | 2 |
| For (i=0; i < A.length; i++){ | 1 + N + 1 + N |
| If (A[i] > currentMax) then | 2N |
| currentMax = A[i] | 2(N - 1) = 2N - 2 |
| } | 0 |
| Return currentMax | 0 |
| **End function** | 0 |
|  |  |
| **Total: T(N)** | 6N + 2 |
|  |  |