```
Binary Search (A, size, target)
  low = 0
  high = size
  while (low+1 < high)
    test = (low + high) // 2
    if (A[test] > target)
      high = test
    else
      low = test
  if (A[low] == target)
    return low
  else
    return -1
```

Register usage:

$t0: Base address of A
$t1: Length of A
$t2: Low
$t3: Low+1
$t4: high
$t5: test
$t6: Value of A[X], address of A

also: $T7: target