BINARY SEARCH FROM ONE DIMENSION TO TWO DIMENSION

search key=3 in the array

4 7 12 15 19 25 30 35

Algorithm 1 Binary Search algorithm

```
1: procedure BINSEARCH(array, lo, hi, key)
        r \leftarrow a \bmod b
        while r \neq 0 do
                                                               \triangleright We have the answer if r is 0
3:
            a \leftarrow b
4:
            b \leftarrow r
5:
            r \leftarrow a \bmod b
6:
        end while
7:
                                                                                    \triangleright The gcd is b
        \mathbf{return}\ b
9: end procedure
```