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| --- | --- |
| Pseudocode | Time of cost |
| number <- any given integer value  IS\_PRIME(num, test <- number)  If num ≤ 2 OR test = 1 {  Return TRUE  } Else If num mod test = 0 {  Return IS\_PRIME(num, test-1)  }  Return FALSE  }  PRINT IS\_PRIME(number) | 1  1  1  1  n  1  1 |
| **Runtime bound:** | f(n) = 6 + n |
| **Complexity:** | O(n) |

**Note**: if a specifically large integer value is entered, the program returns a recursion error in the stack, as the language, in which the code is implemented, has a recursion limit. The try-except statement resolves this by return False by default, if a recursion error is detected.