Online Test 1 Question 5

Due on 2020-12-01, 12:00 IST

Question 5

A positive integer n is a sum of squares if $n = i^2 + j^2$ for integers i,j such that $i \geq 1$ and $j \geq 1$. For instance, 10 is a sum of squares because $10 = 1^2 + 3^2$, and so is 25 ($3^2 + 4^2$). On the other hand, 11 and 3 are not sums of squares.

Write a Python function `sumofsquares(n)` that takes a positive integer argument and returns `True` if the integer is a sum of squares, and `False` otherwise.

Sample Test Cases

	Input	Output
Test Case 1	`sumofsquares(3219)`	`False`
Test Case 2	`sumofsquares(3218)`	`True`
Test Case 3	`sumofsquares(695005)`	`True`
Test Case 4	`sumofsquares(2)`	`True`
Test Case 5	`sumofsquares(10)`	`True`
Test Case 6	`sumofsquares(11)`	`False`

The due date for submitting this assignment has passed.
As per our records you have not submitted this assignment.

- **function definitions, sorting ()**
- **Week 3 Programming Assignment ()**
- **Week 4: Sorting, Tuples, Dictionaries, Passing Functions, List Comprehension ()**
- **Week 4 Quiz ()**
- **Week 4 Programming Assignment ()**
- **Week 5: Exception handling, input/output, file handling, string processing ()**
- **Week 5 Programming Assignment ()**
- **Week 6: Backtracking, scope, data structures; stacks, queues and heaps ()**
- **Week 6 Quiz ()**

- Online Test 1 Question 3 (/noc20_cs26/progassignment?name=134)
- Online Test 1 Question 4 (/noc20_cs26/progassignment?name=136)
- **Online Test 1 Question 5 (/noc20_cs26/progassignment?name=137)**
- Online Test 1 Question 6 (/noc20_cs26/progassignment?name=138)
- Online Test 1 Question 7 (/noc20_cs26/progassignment?name=139)
- Online Test 1 Question 8 (/noc20_cs26/progassignment?name=140)

Online Programming Test 2, 01 Dec 2020, 20:00-22:00 ()

Online Programming Test 1, 09 Mar 2021, 10:00-12:00 ()

Online Programming Test 2, 09 Mar 2021, 20:00-22:00 ()