# A test of "programming for beginners"- 25 June 2017

## Task 2 . World record in swimming

Mikael decided to improve the world record on swimming long distances. **The record is entered in the console in seconds that Ahmed should improve, the distance in meters, you need to swim and the time in seconds for which swim a distance of 1 m.** To write a program that calculates whether it is done with the task, considering that: **the resistance of the water it slows every 15 m by 12. 5 seconds. To calculate the time in seconds for which the Charm will swim the distance and the difference compared with the world record.**

**When calculating how many times the Charm will slow down as a result of the resistance of the water the result must be rounded down to the nearest whole number.**

### Login

Be read from the console **3 line**:

**1.** **The record in seconds – a real number in the interval [0. 00 . 100000.00];**

**2.** **The distance in metres – a real number in the interval [0.00 ... 100000.00];**

**3.** **Time in seconds for which swim a distance of 1 m. – a real number in the interval** **[0.00 ... 1000.00];**

### Exit

The printing on the console depends on the result:

* If **he has improved the world record** we print:
  + **"** **Yes, he succeeded! The new world record is {time of Durga} seconds. "**
* If he  **is not**we print:
  + **" No, he failed! He was {missing seconds} seconds slower. "**

**The result should be formatted to the second decimal place**.

### Sample input and output

|  |  |  |
| --- | --- | --- |
| **Login** | **Exit** | **Explanations** |
| 10464  1 500  20 | No, he failed! He was 20786.00 seconds slower. | Mikael must swim **1500 m**. : 1500 \* 20 = **30000 seconds.**  **Every 15 m to time add 12.5 sec**.:  (1 5 00 / 15 \* 12.5) = **1250 sec.**  **Total time:**30000 + 1250 = **31** **250 sec.**  10464 < 31250  **The time is not reached to record:**  31250-10464 = **20786 sec.** |
| **Login** | **Exit** | **Explanations** |
| 5 5 555 .67  301 7  5.03 | Yes, he succeeded! The new world record is 17688.01 seconds. | Mikael must swim **3017 m**.: 3017 \* 5.03 = **15175.51 sec.**  **Every 15 m to time add 12.5 sec**.:  301 7 / 15 = 201 \* 12.5 = **2512.50** **sec.**  **Total time:**15175.51 + 2512.50 = **17688.** **01 sec.**  **The record has been improved:**55555.67 > 17688. 01 |