# A test of "fundamentals of programming"-17 September

## Task 6 . The song of the wheels

Sally Praprapravnukt Yashar has received a heritage-safe with password-four digits. It is locked the secret of the singing carts. It has a garage and is in need of advertising, so he decided to make such a cart. The problem is that the password is hidden in the following task:

***"Password if you know you're going to get a whole number, a control value is called it,***

***rest in the interval of 4 1 to44 including, but to find it might be painful. "***

There is Password format: " **abcd "**and the control value must be equal to n**and** **a\*b + c\*d ,**but you have to comply with the following conditions:

        **finding a and b: a < b**

        **find c and d: c > d .**

**The cart has four wheels, so the password will be the fourth number, which must be printed.**

**In case you do not find such a number, print**" **No !"**.

### Login

From the console is Chet e **an integer (reference value)**: **M**– **an integer in the range [4 . 1 44]**;

### Exit

The printing on the console depends on the result:

      **If you are found fours numbers (abcd), satisfying the condition, otpečatvame them all with a space separator**: **"{a} {b} {c} {d} "**

      **One of the two prints order on a new line:**

          **If there is a fourth Quartet is printed: "Password: {a} {b} {c} {d} "**

          **If you have not found such numbers or not the fourth four otpečatvame**: **"No!"**

### Sample input and output

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Login** | **Exit** | **Explanations** | | | |
| 11 | 1291 1342 1381 1471 1532 1561 1651 1741 1831 1921 2351 2431  Password: 1471 | Start checking the numbers consistently:  {1 } {1} {1} {1}; {1} {1} {1} {2}; {1} {1} {1} {3}; ...; {1} {2} {9} {1}; ...  Quartet 1291**observed condition** **and otpečatvame, etc.** | | | |
| **Login** | **Exit** | **Login** | **Exit** | **Login** | **Exit** |
| 139 | No! | 110 | 6987 7896  No! | 55 | 1786 2595 3585 3974 4575 4793 5754 5853 5952 6871  Password: 3974 |