B. Mister B and Angle in Polygon

time limit per test: 2 seconds
memory limit per test: 256 megabytes
input: standard input
output: standard output

On one quiet day all of sudden Mister B decided to draw angle a on his field. Aliens have already visited his field and left many different geometric figures on it. One of the figures is **regular convex n-gon** (regular convex polygon with n sides).

That's why Mister B decided to use this polygon. Now Mister B must find three distinct vertices v_1, v_2, v_3 such that the angle (where v_2 is the vertex of the angle, and v_1 and v_3 lie on its sides) is as close as possible to a. In other words, the value should be minimum possible.

If there are many optimal solutions, Mister B should be satisfied with any of them.

Input

First and only line contains two space-separated integers n and a ($3 \le n \le 10^5$, $1 \le a \le 180$) — the number of vertices in the polygon and the needed angle, in degrees.

Output

Print three space-separated integers: the vertices v_1, v_2, v_3, which form . If there are multiple optimal solutions, print any of them. The vertices are numbered from 1 to n in clockwise order.

Examples

input

    3 15

output

    1 2 3

input

    4 67

output

    2 1 3

input

    4 68

output

    4 1 2

Note

In first sample test vertices of regular triangle can create only angle of 60 degrees, that's why every possible angle is correct.

Vertices of square can create 45 or 90 degrees angles only. That's why in second sample test the angle of 45 degrees was chosen, since $|45 - 67| < |90 - 67|$. Other correct answers are: "3 1 2", "3 2 4", "4 2 3", "4 3 1", "1 3 4", "1 4 2", "2 4 1", "4 1 3", "3 1 4", "3 4 2", "2 4 3", "2 3 1", "1 3 2", "1 2 4", "4 2 1".

In third sample test, on the contrary, the angle of 90 degrees was chosen, since $|90 - 68| < |45 - 68|$. Other correct answers are: "2 1 4", "3 2 1", "1 2 3", "4 3 2", "2 3 4", "1 4 3", "3 4 1".