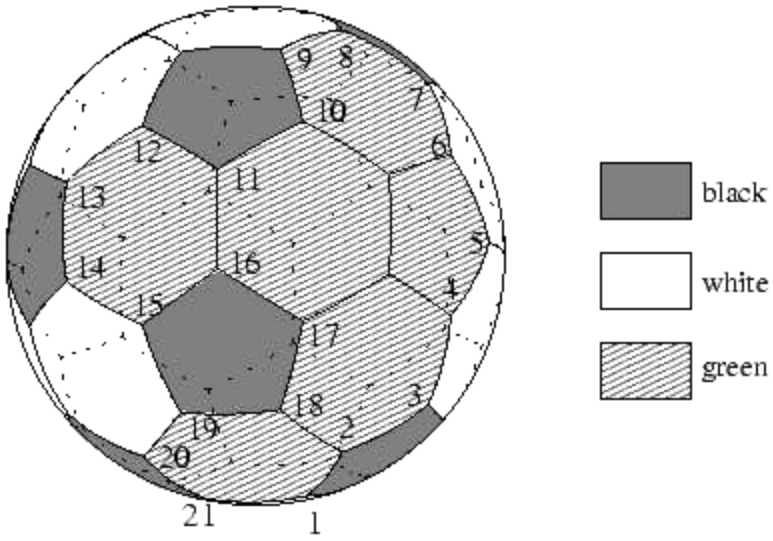
Problem C: Football

Eric has a classic football that is made of 32 pieces of leather: 12 black pentagons and 20 white hexagons. Each pentagon adjoins 5 hexagons and each hexagon adjoins 3 pentagons and 3 hexagons. Eric drew a polygon (i.e. a closed line without intersections) along the edges of the pieces. The polygon divided the ball into two parts and Eric painted one of them green.



He is curious if given the description of the polygon you are able to compute the number of black, white and green pieces?

1 Task

Write a program that:

- reads the description of the polygon from the standard input,
- computes the number of black, white and green pieces,
- writes the result to the standard output.

2 Input

The first line of the input contains one integer n being the number of vertices of the polygon. The second line of the input contains n integers $a_1, a_2, ..., a_n$ separated by single spaces. Integer a_i (equal 1 or 2) is the number of green pieces adjoining the i-th vertex of the polygon. The side of the polygon connecting the n-th and the first vertex always lies between two hexagons.

3 Output

The first and only line of the output contains three integers b, w and g. These are the numbers of black, white and green pieces respectively.

4 Example

For the input:

```
21
1 2 1 2 1 2 1 1 1 2 2 1 1 1 1 2 2 2 1 1 1
```

the correct answer is:

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11 15 6
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This document was translated from L^AT_EX by H^EV^EA.