## Christmas Spirit

*It is time to get in a Christmas mood. You need to decorate the house in time for the big event, but you have limited days to do so.*

You will receive **allowed quantity** for **one type** of decoration and **days** **left** until Christmas day to decorate the house.

There are **4 types** of decorations and each piece costs a **price**

* Ornament Set – 2$ a piece
* Tree Skirt – 5$ a piece
* Tree Garlands – 3$ a piece
* Tree Lights – 15$ a piece

Every **second day** you buy an **Ornament Set** quantity of times and **increase** your Christmas spirit by **5**.

Every **third day** you buy **Tree Skirts** and **Tree Garlands** (both quantity of times) and **increase** your spirit by **13**.

Every **fifth day** you buy **Tree Lights** quantity of times and **increase** your Christmas spirit by **17**. If you have bought Tree Skirts and Tree Garlands at the **same day** you **additionally increase** your spirit by **30**.

Every **tenth day** you **lose 20 spirit**, because your cat ruins all tree decorations, and you should rebuild the tree and buy **one** piece of tree **skirt**, **garlands,** and **lights**. That is why you are forced to **increase** the allowed **quantity with 2** at the **beginning** of every **eleventh day**.

Also, if the **last day** is a **tenth day** the cat decides to demolish even more and ruins the Christmas turkey, and you **lose** additional **30 spirit**.

At the end you must print the **total cost** and the **gained spirit**.

### Input / Constraints

The input will consist of **exactly 2 lines**:

* quantity – **integer in range [1…100]**
* days **– integer in range [1…100]**

### Output

At the end print the **total cost** and the total gained **spirit** in the following format:

* **"Total cost: {budget}"**
* **"Total spirit: {totalSpirit}"**

### Examples

|  |  |  |  |
| --- | --- | --- | --- |
| **Input** | **Output** | **Input** | **Output** |
| 1  7 | Total cost: 37  Total spirit: 58 | 3  20 | Total cost: 558  Total spirit: 156 |