Problem 1. Christmas Spirit

It's time to get in a Christmas mood. You have 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 have to 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
1 7	Total cost: 37 Total spirit: 58
Input	**Output**
3 20	Total cost: 558 Total spirit: 156