UNIVERSITY CUP

ENTELECT CHALLENGE 2022

PRACTICE PROBLEM

Introduction

You are the leader of one of the last remaining colonies on the frozen planet. Your cartographers have come to you with a weird phenomenon. While mapping out some regions, they have discovered that there are weird numbers formed by the mountains. They have asked you to identify the numbers for them so they can continue with their research.

Maps

The maps will be provided in a single line of zero-padded, 3-digit numbers denoting the elevation of each grid tile as follows:

```
map_size=6,10 //rows,columns

127127194237251117191249191107128150232076201117182141190107120119189237178118217224201157123112095147213158166078205111185155116047191160110111238125250220151168090110088146151097
```

Elevations

There are four different landscape types, each at a different elevation:

Elevation	Symbol	Type
0-100	S	Snow
101-150	I	Ice
151-175	TS	Thick Snow
176-255	M	Mountain

You must parse the map into its grid and determine the number created by the mountain tiles somewhere on the map. It will always be two digits i.e., 05, 21, 08 etc. The digits are 7-segment formatted numbers (Seven-segment display - Wikipedia**).**

Input files

All this information will be provided in the `map.txt` file.

map.txt:

```
map_size=6,10

127127194237251117191249191107128150232076201117182141190107201191892371
781182172242011571231120951472131581660782051111361551160471911601101112 3
812511211915116809011008814615109 7

0-100 Snow
101-150 Ice
151-175 Thick Snow
176-255 Mountain
```

Grid

127	127	194	237	251	117	191	249	191	107
128	150	232	076	201	117	182	141	190	107
120	119	189	237	178	118	217	224	201	157
123	112	095	147	213	158	166	078	205	111
185	155	116	047	191	160	110	111	238	125
250	220	151	168	090	110	088	146	151	097

= Mountain

Submissions

Submissions must simply be a string of the number, for each map, as follows:

```
“99”
```

Remember to include your source code for the solution in a zipped archive.

Scoring

Correct answers will receive a score of 100, incorrect answers will receive a score of 0.