Say you have to access different **RAM** locations at different points of your code execution. If a specific **RAM** location is frequently accessed, it would be faster if the content of that location is placed inside **CACHE**.

Suppose your CPU Cache is divided into 2 levels:
1. L1 Cache: which is faster and smaller. Generally, it stores contents of one memory location which has an access rate >= 50%.
2. L2 Cache: This is slower than L1 Cache but has more space. Generally, it stores contents of two memory locations based on access rate >= 30%.

You are assigned to the following tasks

	Task	Marks
1	Write a **Program class** that interacts with the user, i.e., takes input memory location from the user and sends back the contents to the user.	5
2	The program class adjoins the **Cache class** and **RAM class**, and most importantly attains the above-given characteristics.	10
3	Make a unit test to check whether the most frequent locations are placed inside the Cache.	5

N.B

- The user has only access to the **Program** to access RAM..
- Consider creating a RAM of at least 10 memory locations.
- Consider accessing RAM locations at least 20 times and update the access rate after 5 access instructions.