

Name and First name: _____ Group: _____

Subject 1

*Only solutions that do not contain compile errors will be evaluated.

**Only the methods tested in main() will be evaluated.

Implement the **GeneralStore** class

- **storeId** – code represented by a constant integer,
- **location** – static array of 40 characters or a string that describes the store location,
- **brand** – enumeration with MEGA_IMAGE, KAUF LAND, LIDLE, PENNY types
- **isHypermarket** – boolean that marks if the store is a hypermarket, by default is not
- **receiptsValue** – variable vector, dynamically allocated, with float numbers representing the value of each client receipt,
- **noClients** – integer that records number of clients
- **RECEIPT_MAX_VALUE** – **constant static** real number representing the maximum value of a receipt, initialized with 15000

and develop the C++ application that contains the following instructions in main():

1pt	Class definition and attributes as required. -0.5 pts of enumeration is not defined and used
1pt	Implement destructor to avoid memory leaks
1pt	<pre>void main() { GeneralStore store1(10, "Bucharest", LIDLE); //10 is the storeId cout << store1.getLocation(); // prints Bucharest int receipts[]={ 201, 356.8, 400.5, 100}; GeneralStore store2(20, "Ploiesti", receipts, 4, PENNY); cout << "\n"<<store2.getReceiptsValue(); //prints 1058.3</pre>
1pt	<pre>GeneralStore store3 = store2; cout << "\n" << store3.getId(); //prints 20 store3.ExpandToHypermarket() //makes the store a hypermarket</pre>
1pt	<pre>store3.registerReceipt(300); //add a new client receipt with the value 300 //validate the receipt value not to exceed // RECEIPT_MAX_VALUE cout << "\n" << store3.getNoClients(); //prints 5</pre>
1pt	<pre>store1 = store3; cout << "\n" << store1.getReceiptValue(2); //prints the value of the n-th // receipt</pre>
1pt	<pre>cout << store1; //prints store data // - the brand must be printed as a string // - if isHypermarket print a message</pre>
1pt	<pre>float averageValue = (float)store1; //computes the average value of receipts cout << "\n" << averageLiters;</pre>
1pt	<pre>store1 -= 10; //updates all receipts value //lowering it with 10, but not below 0 cout << store1;</pre>
1pt	<pre>if (store1 > 5000) cout << "\n Store 1 has sold more than 5000"; else cout << "\n Store 1 has sold less than 5000";</pre>