**Notification and Location**

Devi Shipping Company wanted to notify the status of every Cargo’s location to their end customer at every transit. They intended to send this information via SMS which is integrated with their application. They have many of such cargo’s to be delivered and so many messages need to be sent. To handle this large data, the tech-team decided to automate the message sending process with multi-threading.

For every StatusCode,there is an equaivalent message to be printed, refer the following:

|  |  |
| --- | --- |
| **Status Code** | **Message** |
| 100 | Arrived at destination |
| 101 | Attempted delivery |
| 102 | Awaiting unloading at consignee |
| 103 | Delayed en route to destination |
| 104 | Delivered part short |
| 105 | En route to destination |
| 106 | En route to Hawali |
| 107 | Late but no possible delay notification sent |
| 108 | Out of delivery |

Given the number of notifications and location, please sms to the end users using threads.

Create a class named **NotificationManager** with the following private member variables

* Static NotificationManager instance
* Static Map<Integer,String>messages

Include appropriate getters and setters

Include default and parameterized constructor with following order **(instance,message)**

And include a method as follows:

|  |  |  |
| --- | --- | --- |
| **No** | **Method Name** | **Method Description** |
| 1 | Public Void sendMessage() | In this method,which sends the message |

Create another class named **NotificationThread** that implements the Runnable interface with the following private member variables

* List<String>notification

Include the following methods in the class.,

Include default and parameterized constructor.

And also include following override method,

|  |  |  |
| --- | --- | --- |
| **No** | **Method Name** | **Method Description** |
| 1 | Public void run() | Override the run method,call the NotificationManager.sendMessage() to send the SMS to the customer |

**[All text in bold corresponds to input and rest corresponds to output.]**

**[Note : Strictly adhere to the object oriented specifications given as a part of the problem statement. Use the same class names,attribute names and method names.]**