Exercise Mountains Comparator<T>

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| Modify class Mountain so that a collection of mountains can be sorted   * by name (natural order) * by continent * by altitude   The comparators should be implemented with nested classe and class Mountain should include two constant fields of type Comparator<Mountain> that make the comparators available to other classes.  **Hint:**  *for a template on how to implement comparators with nested static classes check out  Algorithms 4 > Lecture Slides > Mergesort > slide 47*  Modify the test client (MountainApp) so that it does the following:   * Prints the list of mountains * Sorts by natural order and prints * Sorts by continent and prints * Sorts by altitude and prints   Each moutain should be displayed in a separate line and the output should be grouped by single empty lines | **Expected Output:** Original:  Everest ASIA Nepal 8848m  Mt McKinley NORTH\_AMERICA USA 6194m  Timpanogos NORTH\_AMERICA USA 3582m  Kilimanjaro AFRICA Tanzania 5895m  Mt Fuji ASIA Japan 3776m  Matterhorn EUROPE Switzerland 4478m  Mt Rainier NORTH\_AMERICA USA 4392m  Nanga Parbat ASIA PAKISTAN 8126m  Natural Order:  Everest ASIA Nepal 8848m  Kilimanjaro AFRICA Tanzania 5895m  Matterhorn EUROPE Switzerland 4478m  Mt Fuji ASIA Japan 3776m  Mt McKinley NORTH\_AMERICA USA 6194m  Mt Rainier NORTH\_AMERICA USA 4392m  Nanga Parbat ASIA PAKISTAN 8126m  Timpanogos NORTH\_AMERICA USA 3582m  By Continent:  Kilimanjaro AFRICA Tanzania 5895m  Everest ASIA Nepal 8848m  Mt Fuji ASIA Japan 3776m  Nanga Parbat ASIA PAKISTAN 8126m  Matterhorn EUROPE Switzerland 4478m  Mt McKinley NORTH\_AMERICA USA 6194m  Mt Rainier NORTH\_AMERICA USA 4392m  Timpanogos NORTH\_AMERICA USA 3582m  By Altitude:  Timpanogos NORTH\_AMERICA USA 3582m  Mt Fuji ASIA Japan 3776m  Mt Rainier NORTH\_AMERICA USA 4392m  Matterhorn EUROPE Switzerland 4478m  Kilimanjaro AFRICA Tanzania 5895m  Mt McKinley NORTH\_AMERICA USA 6194m  Nanga Parbat ASIA PAKISTAN 8126m  Everest ASIA Nepal 8848m |