

## JAVA FUNDAMENTALS ASSIGNMENT

1. Read an XML file "student.xml" containing list of student data in the following format, deserialize them into java objects, then serialize the unique <rollnumber, total marks(Phy+chem+math)> to a text file "student.txt" with appropriate exception handling.

```
<students>
<student>
<roll>12</roll>
<marks>85</marks>
<subject>Maths</subject>
</student>
<student>
<roll>13</roll>
<marks>60</marks>
<subject>physics</subject>
</student>
<student>
<roll>15</roll>
<marks>79</marks>
<subject>chemistry</subject>
</student>
<student>
<roll>13</roll>
<marks>85</marks>
<subject>Maths</subject>
</student>
<student>
<roll>15</roll>
<marks>60</marks>
<subject>physics</subject>
</student>
<student>
<roll>12</roll>
<marks>79</marks>
<subject>chemistry</subject>
</student>
<student>
<roll>13</roll>
<marks>85</marks>
<subject>chemistry</subject>
</student>
</students>
```

```

<roll>15</roll>
<marks>60</marks>
<subject>maths</subject>
</student>
<student>
<roll>12</roll>
<marks>79</marks>
<subject>physics</subject>
</student>
</students>

```

- Secondly, deserialize the previously stored student.txt file with roll num and total marks. Then, serialize the top 5 students' roll numbers and total marks into excel or csv file in the following format.

Rank	Roll Number	Total Marks(out of 300)
1	12	290
2	45	286
3	60	278
.....		
..... So on		

- Write the implementation for singleton class.