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/Users/khalidkhan/Workspace/CPP/SmallGroupProject01/cmake-build-debug/SmallGroupProject01
CSC 340 Small Group Project | Group 2
1) Generate a histogram of randomly generated floating-point numbers according to a normal distribution with a user-specified mean and standard deviation.
2) Generate a histogram of randomly generated floating-point numbers according to a uniform distribution with a user-specified minimum and maximum.
3) There are x learners who haven't found a small group yet. Please design and implement an algorithm to randomly assign them to an existing group or a newly created group if all existing groups are full. Constraints: (1) Each group will be limited to 3 members; and (2) students in the same group must be enrolled in the same section.
0) Exit
Please enter a number: 1
You chose Q1
Enter Mean
50
Enter Standard Deviation (Standard deviation should be greater than or equal to 1)
2
Enter Number of Samples
20000
Enter Number of Bins
9

                                    *
                                    *
                                    *
                                    *
                            *       *       *
                            *       *       *
                            *       *       *
                    *       *       *       *       *
      42      44      46      48      50      52      54      56      58

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0) Exit
Please enter a number: 2
You chose 2
Enter range of numbers:
2
10
Enter Number of Samples
20000
Enter Number of Bins
21

                                                                                                    *
              *       *       *                               *       *               *       *               *       *       *       *       *       *
              *       *       *       *       *       *       *       *       *       *       *       *       *       *       *       *       *       *
              *       *       *       *       *       *       *       *       *       *       *       *       *       *       *       *       *       *
              *       *       *       *       *       *       *       *       *       *       *       *       *       *       *       *       *       *
      *       *       *       *       *       *       *       *       *       *       *       *       *       *       *       *       *       *       *
      *       *       *       *       *       *       *       *       *       *       *       *       *       *       *       *       *       *       *
      *       *       *       *       *       *       *       *       *       *       *       *       *       *       *       *       *       *       *
      2     2.4     2.8     3.2     3.6       4     4.4     4.8     5.2     5.6       6     6.4     6.8     7.2     7.6       8     8.4     8.8     9.2     9.6      10

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0) Exit
Please enter a number: 3
You chose 3
Group number 0 means student is not in any group yet.
```

```
 59 Student      Sec  Group
 60 Khalid       1      1
 61 Jaylene      1      1
 62 Diya         1      1
 63 Hilary       1      2
 64 Khaliesi     1      2
 65 Dat          1      3
 66 Sam          1      4
 67 Elena        1      4
 68 Miguel       1      4
 69 Leo          1      5
 70 Zack         1      5
 71 Rene         2      1
 72 Emma         2      1
 73 Oliver       2      1
 74 Liam         2      2
 75 Ava          2      2
 76 Benjamin     2      3
 77 Charlotte    2      4
 78 Amelia       2      4
 79 Elijah       2      5
 80 Harper       2      5
 81 James        2      5
 82 Sara         1      2
 83 Lucas        1      0
 84 Marie        1      0
 85 Mia          1      0
 86 Sophia       2      3
 87 Noah         2      0
 88 Isabella     2      0
 89 William      2      0
 90 Alice        1      0
 91 Bob          1      0
 92 Charlie      1      0
 93 Daisy        1      0
 94 Edward       1      0
 95 Fiona        2      0
 96 George       2      0
 97 Hannah       2      0
 98 Enter number of Sections:
 99 2
100 Enter number of members per group:
101 3
102 Initial grouping of students:
103 Section 1
104 Group 0
105 Lucas      Marie      Mia        Alice      Bob        Charlie    Daisy      Edward
106 Group 1
107 Khalid     Jaylene    Diya
108 Group 2
109 Hilary     Khaliesi   Sara
110 Group 3
111 Dat
112 Group 4
113 Sam        Elena      Miguel
114 Group 5
115 Leo        Zack
116
117 Section 2
118 Group 0
119 Noah       Isabella   William    Fiona      George     Hannah
```

```
120 Group 1
121 Rene       Emma       Oliver
122 Group 2
123 Liam       Ava
124 Group 3
125 Benjamin   Sophia
126 Group 4
127 Charlotte  Amelia
128 Group 5
129 Elijah     Harper     James
130
131 Final grouping of students:
132 Section 1
133 Group 0
134
135 Group 1
136 Khalid     Jaylene    Diya
137 Group 2
138 Hilary     Khaliesi   Sara
139 Group 3
140 Dat        Mia        Marie
141 Group 4
142 Sam        Elena      Miguel
143 Group 5
144 Leo        Zack
145 Group 6
146 Edward     Lucas      Daisy
147 Group 7
148 Bob        Alice      Charlie
149
150 Section 2
151 Group 0
152
153 Group 1
154 Rene       Emma       Oliver
155 Group 2
156 Liam       Ava        William
157 Group 3
158 Benjamin   Sophia     Isabella
159 Group 4
160 Charlotte  Amelia     Fiona
161 Group 5
162 Elijah     Harper     James
163 Group 6
164 Hannah     George     Noah
165
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    existing groups are full. Constraints: (1) Each group will be limited to 3 members; and (2) students in the same group must be enrolled in the same section.
169 0) Exit
170 Please enter a number:
171 Process finished with exit code 143 (interrupted by signal 15: SIGTERM)
172
```