Name/Username: _____

Question 4: For each part of this question, please assume that the hash table is in the state shown below. For parts A, B and J, please answer the question. For the other parts, I give you a name and a collision resolution strategy. For parts C through I, tell me the index where the name will be inserted, with the given collision resolution strategy. Please assume that Hash-1 is used as the primary hash function, and for double-hashing, that Hash-2 is the second hash function.

Index	Value
0	"Noah Peggy"
1	
2	"Dylan Maxwellian IV"
3	"Matthew Manuel IV"
4	"Kate Muffle"
5	
6	"Carter Blake Jilt"
7	"Claire Electrician"
8	"Jackson Diethylstilbestrol"
9	"Sophie Kiva"
10	"Wyatt Dramaturgy MD"
11	
12	
13	
14	
15	
16	"Connor Acetic"
17	
18	"Alex Cartilaginous"
19	
20	"Connor Christopher Referential"
21	"Bailey Prosthetic"
22	"Benjamin Woodard"
23	
24	"Brayden Begun"
25	"Chloe Indelicate"
26	"Christian Sherlock"
27	"Alexandra Antiperspirant"
28	"Paige Sims"
29	
30	
31	"Xavier Assurance"
32	
33	"Cole Essay MD"
34	"Kayla Stimulatory"
35	"Dontonio Aurelius"
36	"Mia"
37	"Paige Gemstone"
38	"Caleb Roll"
39	"Alyssa Landlord"
40	"Arianna Bestubble"
41	"Connor Sex"
42	"Caleb Rangeland"
43	
44	"Wyatt Howsomever"
45	"Hailey Brookside"
46	"Michael Transitory"
47	"Ryan Salsify"
48	"Layla Tory"
49	"Brody Hoe"

Name	Hash-1	Hash-2
"Allison Leapt"	1315943917	1331582591
"Alyssa Leander"	3902156461	332365763
"Brooklyn Fully"	2607217921	3211188325
"Christopher Phonon"	371017602	1846088603
"Cooper"	2889879245	1554673267
"Dontonio Assure"	4172239234	3886162257
"Ellie Duopoly"	1820663580	3521867217
"Isabelle Dreamlike"	1839292724	215980853
"John Laurence"	2035000963	966043207
"Kate Leatherneck"	296598416	1950178817
"Katelyn Smallpox PhD"	3075196713	2954160787
"Madeline Hallmark"	297775920	2164866659
"Savannah Kennecott"	4034631744	3878691109
"Tristan Dab"	782764689	3602875903
"Tyler Inhumane IV"	3866910345	82161627
"Tyler Zachary Galway"	3584891948	2389040429
"Xavier Press"	642371937	1429759433
"Zoe Ulster"	3334756242	4150064069

Q4A: What is the load factor of this table?
You may give a fraction: _____

Q4B: Is this a good load factor? Answer Y or N: _____

Q4C: "Madeline Hallmark", Linear Probing: _____

Q4D: "Cooper", Quadratic Probing: _____

Q4E: "Savannah Kennecott", Double Hashing: _____

Q4F: "Dontonio Assure", Quadratic Probing: _____

Q4G: "John Laurence", Linear Probing: _____

Q4H: "Christopher Phonon", Double Hashing: _____

Q4I: "Tyler Inhumane IV", Linear Probing: _____

Q4J: In the table above, there is one name which is impossible to insert into the table with double-hashing. What is that name? (You should be able to answer this quickly. If not, skip it, and move on):

_____