c. In the hash table below of size 11, *double hashing* with the hash functions $h_1(k) = 3k \bmod 11$ and $h_2(k) = 1 + (4k \bmod 10)$has been used.

0	1	2	3	4	5	6	7	8	9	10
11			12		9				22	18

Find the positions that the five elements 1, 3, 4, 5, and 7 will be inserted into. For each insertion, assume that the hash table only contains the elements shown above, i.e. 9, 11, 12, 18 and 22

	0	1	2	3	4	5	6	7	8	9	10
INSERT(1)	○	○	○	○	○	○	○	○	◉ ✔	○	○
INSERT(3)	○	◉ ✔	○	○	○	○	○	○	○	○	○
INSERT(4)	○	◉ ✔	○	○	○	○	○	○	○	○	○
INSERT(5)	○	○	○	○	◉ ✔	○	○	○	○	○	○
INSERT(7)	○	○	○	○	○	○	○	○	◉ ✔	○	○

c. In the hash table below of size 11, *double hashing* with the hash functions $h_1(k) = 5k \bmod 11$ and $h_2(k) = 1 + (5k \bmod 10)$ has been used.

0	1	2	3	4	5	6	7	8	9	10
	20		16	14					4	5

Find the positions that the five elements 0, 2, 3, 6 and 8 will be inserted into. For each insertion, assume that the hash table only contains the elements shown above, i.e. 4, 5, 14, 16
and 20.

	0	1	2	3	4	5	6	7	8	9	10
INSERT(0)	◉ ✔	○	○	○	○	○	○	○	○	○	○
INSERT(2)	◉ ✔	○	○	○	○	○	○	○	○	○	○
INSERT(3)	○	○	○	○	○	◉ ✔	○	○	○	○	○
INSERT(6)	○	○	○	○	○	○	○	○	◉ ✔	○	○
INSERT(8)	○	○	○	○	○	○	○	◉ ✔	○	○	○

c. In the hash table below of size 11, *double hashing* with the hash functions $h_1(k) = 2k \bmod 11$ and $h_2(k) = 1 + (5k \bmod 10)$has been used.

0	1	2	3	4	5	6	7	8	9	10
16				2		3	9			13

Find the positions that the five elements 1, 5, 6, 8, and 11 will be inserted into. For each insertion, assume that the hash table only contains the elements shown above, i.e. 2, 3, 9, 13
and 16

	0	1	2	3	4	5	6	7	8	9	10
INSERT(1)	○	○	◉ ✔	○	○	○	○	○	○	○	○
INSERT(5)	○	○	○	○	○	◉ ✔	○	○	○	○	○
INSERT(6)	○	◉ ✔	○	○	○	○	○	○	○	○	○
INSERT(8)	○	○	○	○	○	◉ ✔	○	○	○	○	○
INSERT(11)	○	◉ ✔	○	○	○	○	○	○	○	○	○