

Computer Science

Hw 12:

Question 1:

afghanistan	Index 2	afghanistan encode(a) = 1 encode(g) = 7 encode(a) = 1 encode(i) = 9 encode(t) = 20 encode(n) = 14 Sum = 52 sum%10 = 2
latvia	Index 1	latvia encode(l) = 12 encode(t) = 20 encode(i) = 9 Sum = 41 Sum%10 = 1
myanmar	Index 5	myanmar encode(m) = 13 encode(a) = 1 encode(m) = 13 encode(r) = 18 Sum = 45 Sum%10 = 5
canada	Index 1	canada encode(c) = 3 encode(n) = 14 encode(d) = 4 Sum = 21 Sum%10 = 1

papuanewguinea	Index 9	<p>papuanewguinea</p> <p> encode(p) = 16 encode(p) = 16 encode(a) = 1 encode(e) = 5 encode(g) = 7 encode(i) = 9 encode(e) = 5 </p> <p> Sum = 59 Sum%10 = 9 </p>
ecuador	Index 8	<p>ecuador</p> <p> encode(e) = 5 encode(u) = 21 encode(d) = 4 encode(r) = 18 </p> <p> Sum = 48 Sum%10 = 8 </p>
mongolia	Index 1	<p>mongolia</p> <p> encode(m) = 13 encode(n) = 14 encode(o) = 15 encode(i) = 9 </p> <p> Sum = 51 Sum%10 = 1 </p>
newzealand	Index 8	<p>newzealand</p> <p> encode(n) = 14 encode(w) = 23 encode(e) = 5 encode(l) = 12 encode(n) = 14 </p> <p> Sum = 68 Sum%10 = 8 </p>

Question 2:

There were 7 collisions.

Question 3:

$$\begin{aligned}\text{Afghanistan} &= (37*3 + 52)\%10 \\ &= 3\end{aligned}$$

			Afg						
--	--	--	-----	--	--	--	--	--	--

$$\begin{aligned}\text{Latvia.} &= (2*5 + 41)\%10 \\ &= 1\end{aligned}$$

	Lat		Afg						
--	-----	--	-----	--	--	--	--	--	--

$$\begin{aligned}\text{Myanmar} &= (53*3 + 45)\%10 \\ &= 4\end{aligned}$$

	Lat		Afg	Myan					
--	-----	--	-----	------	--	--	--	--	--

$$\begin{aligned}\text{Canada} &= (37*6 + 21)\%10 \\ &= 3\end{aligned}$$

	Lat		Afg	Myan	Cana				
--	-----	--	-----	------	------	--	--	--	--

Canada--->Canada

$$\begin{aligned}\text{Ecuador} &= (17*7 + 59)\%10 \\ &= 8\end{aligned}$$

	Lat		Afg	Myan	Cana			Ecuad	
--	-----	--	-----	------	------	--	--	-------	--

Mongolia = (3*3 + 48)%10

= 7

	Lat		Afg	Myan	Cana		Mong	Ecuad	
--	-----	--	-----	------	------	--	------	-------	--