1. Open problems in computational biology

	(a) When did humans and chimpanzees last share a common ancestor?(b) What genes impact the risk of diabetes?(c) How does malaria become resistant to antibiotics?																			
		2.	Z-sco	ores																
	G	G	A	A	G	G	A	A	G	A	G	G	G	A	A	G	G	A	A	G
Z_k																				
		3. Z -algorithm																		
	G	G	A	A	G	G	A	A	G	A	G	G	G	A	A	G	G	A	A	G
k																				
case																				
j																				
Z_{j}																				
$ \beta $																				
Z_k																				
ℓ																				
r																				