Lab 2

Q1:

Key is 3

ONE VARIATION TO THE STANDARD CAESAR CIPHER IS WHEN THE ALPHABET IS "KEYED" BY USING A WORD. IN THE TRADITIONAL VARIETY, ONE COULD WRITE THE ALPHABET ON TWO STRIPS AND JUST MATCH UP THE STRIPS AFTER SLIDING THE BOTTOM STRIP TO THE LEFT OR RIGHT. TO ENCODE, YOU WOULD FIND A LETTER IN THE TOP ROW AND SUBSTITUTE IT FOR THE LETTER IN THE BOTTOM ROW. FOR A KEYED VERSION, ONE WOULD NOT USE A STANDARD ALPHABET, BUT WOULD FIRST WRITE A WORD (OMITTING DUPLICATED LETTERS) AND THEN WRITE THE REMAINING LETTERS OF THE ALPHABET. FOR THE EXAMPLE BELOW, I USED A KEY OF "RUMKIN.COM" AND YOU WILL SEE THAT THE PERIOD IS REMOVED BECAUSE IT IS NOT A LETTER. YOU WILL ALSO NOTICE THE SECOND "M" IS NOT INCLUDED BECAUSE THERE WAS AN M ALREADY AND YOU CAN'T HAVE DUPLICATES

Q2:

Key is 17

ONE VARIATION TO THE STANDARD CAESAR CIPHER IS WHEN THE ALPHABET IS "KEYED" BY USING A WORD. IN THE TRADITIONAL VARIETY, ONE COULD WRITE THE ALPHABET ON TWO STRIPS AND JUST MATCH UP THE STRIPS AFTER SLIDING THE BOTTOM STRIP TO THE LEFT OR RIGHT. TO ENCODE, YOU WOULD FIND A LETTER IN THE TOP ROW AND SUBSTITUTE IT FOR THE LETTER IN THE BOTTOM ROW. FOR A KEYED VERSION, ONE WOULD NOT USE A STANDARD ALPHABET, BUT WOULD FIRST WRITE A WORD (OMITTING DUPLICATED LETTERS) AND THEN WRITE THE REMAINING LETTERS OF THE ALPHABET. FOR THE EXAMPLE BELOW, I USED A KEY OF "RUMKIN.COM" AND YOU WILL SEE THAT THE PERIOD IS REMOVED BECAUSE IT IS NOT A LETTER. YOU WILL ALSO NOTICE THE SECOND "M" IS NOT INCLUDED BECAUSE THERE WAS AN M ALREADY AND YOU CAN'T HAVE DUPLICATES

Q3:

Keyword: KISWAHILI

NIST IS ABOUT TO ANNOUNCE THE NEW HASH ALGORITHM THAT WILL BECOME SHA-3. THIS IS THE RESULT OF A SIX-YEAR COMPETITION, AND MY OWN SKEIN IS ONE OF THE FIVE REMAINING FINALISTS (OUT OF AN INITIAL 64). IT'S PROBABLY TOO LATE FOR ME TO AFFECT THE FINAL DECISION, BUT I AM HOPING FOR "NO AWARD." IT'S NOT THAT THE NEW HASH FUNCTIONS AREN'T ANY GOOD, IT'S THAT WE DON'T REALLY NEED ONE. WHEN WE STARTED THIS PROCESS BACK IN 2006, IT LOOKED AS IF WE WOULD BE NEEDING A NEW HASH FUNCTION SOON. THE SHA FAMILY (WHICH IS REALLY PART OF THE MD4 AND MD5 FAMILY), WAS UNDER INCREASING PRESSURE FROM NEW TYPES OF CRYPTANALYSIS. WE DIDN'T KNOW HOW LONG THE VARIOUS SHA-2 VARIANTS WOULD REMAIN SECURE. BUT IT'S 2012, AND SHA-512 IS STILL LOOKING GOOD. EVEN WORSE, NONE OF THE SHA-3 CANDIDATES IS SIGNIFICANTLY BETTER. SOME ARE FASTER, BUT NOT ORDERS OF MAGNITUDE FASTER. SOME ARE SMALLER IN HARDWARE, BUT NOT ORDERS OF MAGNITUDE SMALLER. WHEN SHA-3 IS ANNOUNCED, I'M GOING TO RECOMMEND THAT, UNLESS THE IMPROVEMENTS ARE CRITICAL TO THEIR APPLICATION, PEOPLE STICK WITH THE TRIED AND TRUE SHA-512. AT LEAST FOR A WHILE. I DON'T THINK NIST IS GOING TO ANNOUNCE "NO AWARD"; I THINK IT'S GOING TO PICK ONE. AND OF THE FIVE REMAINING, I DON'T REALLY HAVE A FAVORITE. OF COURSE I WANT SKEIN TO WIN, BUT THAT'S OUT OF PERSONAL PRIDE, NOT FOR SOME OBJECTIVE REASON. AND WHILE I LIKE SOME MORE THAN OTHERS, I THINK ANY WOULD BE OKAY. WELL, MAYBE THERE'S ONE REASON NIST SHOULD CHOOSE SKEIN. SKEIN ISN'T JUST A HASH FUNCTION, IT'S THE LARGE-BLOCK CIPHER THREEFISH AND A MECHANISM TO TURN IT INTO A HASH FUNCTION. I THINK THE WORLD ACTUALLY NEEDS A LARGE-BLOCK CIPHER, AND IF NIST CHOOSES SKEIN, WE'LL GET ONE.

Q4:

Base64 Encryption was used as seen by the double equals sign.

On Thursday Google announced that the next version of Android will have encryption enabled by default, protecting user data from anyone who lacks password access. It's a feature lauded by privacy advocates, and matches Apple's new iPhone policy. But Google's new policy isn't very helpful if you own an Android phone that won't be updated to Android L for a while (if ever). But let's not get too bent out of shape. We're here to share how you can encrypt your Android devices running the Jelly Bean and Kit Kat systems. That's right: Privacy features are already built in. You just need to turn them on.

Q5:

Algorithm used is HEX:

On Thursday Google announced that the next version of Android will have encryption enabled by default, protecting user data from anyone who lacks password access. It's a feature lauded by privacy advocates, and matches Apple's new iPhone policy. But Google's new policy isn't very helpful if you own an Android phone that won't be updated to Android L for a while (if ever). But let's not get too bent out of shape. We're here to share how you can encrypt your Android devices running the Jelly Bean and Kit Kat systems. That's right: Privacy features are already built in. You just need to turn them on.

Q6:

Key is 3:

Swahili is the language used to encrypt the text.

The Revolutionary Association with its young people through their union of UVCCM, has come against the chairman of the Constitutional Commission Commissioner, Joseph When he steals, you want him to stop deceiving himself, since the issue of the new Constitution can not be the election of the general elections, in the light. On behalf of UVCCM, he asked Judge Warioba, let him immediately use the guarantees he has been given to be the Chairman of the Commission Changes to the Constitution, since its expiry has been legalized. These statements were issued at different times by party leaders, if they were a few days since Judge Warioba commented on the proposal proposed by the Special Assembly of the Constitution, where he criticized the rejection of some of the views of the people. In addition, he insisted that he would be the President of Tanzanians, regardless of religion, tribe or party, so the government's development does not discriminate. Speaking yesterday in the city here at a campaign meeting attended by thousands of people who admitted being the greatest he has never seen, he has assured them that he will run the country to civilization and not for dictatorship as some people have been claiming. Even after being elected, I will not change, I will remain your child John Magufuli, said and added; I will run the country for civilization, I will not run The country in dictatorship has been with people talking, because I speak the truth with The truth will remain true. People stay in touch with each other. Yeah they have a Chato explain. The fact that when I was a minister was a coward, I was picking up milk.