



**ESCUELA COLOMBIANA DE INGENIERIA
JULIO GARAVITO**

**IT SECURITY AND PRIVACY
GRUPO 1L**

**CRACKING PRACTICE
LABORATORY 7**

**SUBMITTED BY:
JUAN PABLO FERNANDEZ GONZALES
MARIA VALENTINA TORRES MONSALVE**

**SUBMITTED TO:
Ing. DANIEL ESTEBAN VELA LOPEZ**

BOGOTÁ D.C.

**DATE:
10/03/2025**

Breaking the Shift Cipher

This objective is writing a Python script that contains the encrypt and decrypt functions for the shift cypher, as well as a brute force function, and use it to encrypt the following texts using the provided key.

Program Development:

The **getIndex(abc, letter)** function takes an alphabet sequence (abc) and a letter (letter) as input. Its purpose is to find the position of the letter within the given alphabet and return its index. This is essential for determining the current location of a character before applying the shift cipher.

The **getLetter(abc, index)** function takes an alphabet sequence (abc) and an index (index) as input. Its function is to return the letter found at the specified position within the alphabet. This allows retrieving the new encrypted character after performing the shift.

The **enc(k, abc, str)** function implements message encryption using the shift cipher. It takes three parameters: k, which represents the number of positions to shift; abc, the alphabet used; and str, the plaintext message to be encrypted. For each letter in the message, the function retrieves its index using getIndex(), calculates the new position by adding k and applying the modulus operation $((\text{index_act} + k) \% 26)$, and obtains the new letter with getLetter(). Finally, it constructs and returns the encrypted message.



```

cesar.py > enc
1 def getIndex(abc, letter):
2     return abc.index(letter)
3
4 def getLetter(abc, index):
5     return abc[index]
6
7 def enc(k, abc, str):
8     response = ""
9     for i in range(len(str)):
10        index_act = getIndex(abc, str[i])
11        new_index = (index_act + k) % 26
12        response += getLetter(abc, new_index)
13    return response
14

```

We will be testing with the following exercises:

1. ADVANCEDCRYPTOSYSTEMSAREPOWERFUL, with key 8.

Result: *ILDIVKMLKZGXBWAGABMUAIZMXWEMZNCT*

2. SECURECOMMUNICATIONREQUIRESKEYS, with key 15.

Result: *HTRJGTRDBBJCXRPXDCGTFJXGTHZTNH*

3. MATHEMATICALPROOFBACKSENCRIPTION, with key 4.

Result: *QEXLIQEXMGEPTVSSJFEGOWIRGVCTXMSR*

```

cesar.py x
cesar.py > enc
27 abc = ["A", "B", "C", "D", "E", "F", "G", "H", "I", "J", "K", "L", "M", "N", "O", "P", "Q", "R", "S", "T", "U", "V", "W", "X", "Y", "Z"]
28
29 #Excersice 1:
30 print(enc(8, abc, "ADVANCEDCRYPTOSYSTEMSAREPOWERFUL"))
31
32 #Excersice 2:
33 print(enc(15, abc, "SECURECOMMUNICATIONREQUIRESKEYS"))
34
35 #Excersice 3:
36 print(enc(4, abc, "MATHEMATICALPROOFBACKSENCRIPTION"))
37
38
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
+ 1: Python
/usr/local/bin/python3 /Users/maritzamonsalvebautista/Downloads/spti6/cesar.py
maritzamonsalvebautista@MacBook-Pro-de-Maritza spti6 % /usr/local/bin/python3 /Users/maritzamonsalvebautista/Downloads/spti6/cesar.py
ILDIVKMLKZGXBWAGBMUAIZMXWEMZNT
HTRJGTROBBJCKRPJXDCGTFJXGTHZTNH
QEXLIQEXMGEPTVSSJFEGOWIRGVCTXMSR
maritzamonsalvebautista@MacBook-Pro-de-Maritza spti6 %

```

This objective is writing a Python script that contains the encrypt and decrypt functions for the shift cypher, as well as a brute force function, and use it to decrypt the following texts using brute force.

Program Development:

The **getIndex(abc, letter)** function takes an alphabet (abc) and a letter (letter) as input. Its purpose is to find the position of the letter within the given alphabet and return its index. This function is essential for determining the current location of a character before performing encryption or decryption operations.

The **getLetter(abc, index)** function takes an alphabet (abc) and an index (index) as input. Its function is to return the letter found at the specified position within the alphabet. This allows retrieving the correct character after performing a shift operation in encryption or decryption.

The **dec(k, abc, str)** function implements the decryption process of the Shift Cipher. It takes three parameters: k, which represents the number of positions to shift in reverse; abc, the alphabet used; and str, the encrypted message. For each letter in the message, the function retrieves its index using getIndex(), calculates the new position by subtracting k and applying the modulus operation $((\text{index_act} - k) \% 26)$, and obtains the original letter using getLetter(). Finally, it constructs and returns the decrypted message.

The **brute_force(abc, str)** function attempts to decrypt a message without knowing the key (k). To achieve this, it iterates through all possible values of k (from 1 to 25) and applies the dec() function with each one, displaying the results. This allows identifying the correct key by observing which result makes sense in the language the message was originally encrypted in.

We will be testing with the following exercises:

1. KZIXDMUQCVMBZXMZBWDZMTWJWJQVQ

El resultado con más coherencia en inglés es la 8.

2. XTRJYXFDIJSYNHPJXXNTSJFWSFYNTS

```

maritzamonsalvebautista@MacBook-Pro-de-Maritza spti6 % /usr/local/bin/python3 /Users/maritzamonsalvebautista/Downloads/spti6/cesar.py
Exercise 2:
key: 1
NSQJXWECHIRXMGQIWMMSRIZIEVEXMSR
key: 2
VPRFWBDSQHNLFNHVVLRQHGUGDLAQ
key: 3
UQDGVUCAFQPVKEGUAQKQPCCTPCVKQP
key: 4
TPNFUTBZEFUJDLFTTJZPFBOSBUJPO
key: 5
SOMETSAYDENTICESSIONEARNATION
key: 6
RNLDSKZXCMSHB3DRRHHNDZQHSMM
key: 7
QMKCRQYBCLRGALCQOQDLCPYLRQHL
key: 8
PLJBQPVABQFZHBPPFLKBBKXQKQFLK
key: 9
OKSAPQWJZAJPEYGAODEKJAMNZNPEKJ
key: 10
NJJZQNVYTYZIOXFXZNNBZJZVHIVDZJI
key: 11
MIGYVUSXYHNCHEYPMCHYUHLUNCIH
key: 12
LHFXHITBQXQNBVXLLBHGKTKGTMBHG
key: 13
KGBHLSQVWFLAUCWKAQWJSJSLAGF
key: 14
JFDBVKRPUVEKZTBVJZFEVRIERKZFE
key: 15
TECUJIOOTUDJYSAUIVEUQHQJYED
key: 16
HGBTHHNCCTIXRZTHKDCPTGCPIDXC
key: 17
GCASHQKQSBHMQYSGGKCBQFBOHMCB
key: 18
FBZRGFNLGRAGVXPXFFVBARNEANVBA
key: 19
EATQFEMKQZFUQWQEUUAZQWZHUUAZ
key: 20
DZAFELJDPYETNVPDZTZYPLCLETZY
key: 21
CYWDCRINXDSDHUCSSYKQKXKQSYX
key: 22
BXVNCBJHNNCRLLTNBROKMLJAKJCKOM
key: 23
AWLMBALGMYBQKSMQAQWMTZVIBQWY
key: 24
ZYTLAZHFUAPJRLZPZVULHYHAPVU
key: 25
YUSKZGJEKJTZOIKYKQYKXGTGZOUT

```

El resultado con más coherencia en inglés es la 5.

3. GURDHVPXOEBJASBEQWHFGVAINYIRAG

```

/usr/local/bin/python3 /Users/maritzamonsalvebautista/Downloads/spti6/cesar.py
maritzamonsalvebautista@MacBook-Pro-de-Maritza spti6 % /usr/local/bin/python3 /Users/maritzamonsalvebautista/Downloads/spti6/cesar.py
Exercise 3:
key: 1
FTQCGUQNDIAIZRADPVGEFUZHQXQZ
key: 2
ESRFTNWCZHYQZCOUFDETYGLWGPYE
key: 3
DRGASMLBYGXBYBTECDSXKVFQXQ
key: 4
CQNZRLTKAXFWQXASDBCRMEJUEMNC
key: 5
BPRYCQKSJZHEVNZLRCABQVQITDQVB
key: 6
AOLXBJRTRYDQVHYVYQZAPUHSCLUA
key: 7
ZNRQADIQHUCTLUXJAYZOTBGRBKZT
key: 8
YHJVZNPQWTSKTVIIZXYSASFQJJSY
key: 9
XLIUYMGQVFSARJSHVYKQWZEPZIRX
key: 10
WKTXLHNEURZQIRUGKQVWLQYDQYHQW
key: 11
VJGSWKEMDTQPHOTFLMUVPKXQXGSPV
key: 12
UIFRVJDLCSXQGPSEKVTUJQWBPWFQ
key: 13
THEWICKBROWNFORDJUSTINVALENT
key: 14
SGDPTHBJAQVWENQCITRSHPUZKUDPS
key: 15
RFCOSGAIZPMULMPBHSQGLTYJTCLR
key: 16
QENHYZHYOLTCLQAGQPOFKXSISBKQ
key: 17
PDARQYQKNSJBKXZFGQPEJRWRAJP
key: 18
OCZLPQXFMJRIAJMYEPNODIQVGZIO
key: 19
NBTKQOQEVLIQHZZLXQDQWCHPUFFPHN
key: 20
MAXZNDVQXHPGYHKNLMBGOTEQXGM
key: 21
LZNMUACTJGQFXGJVBKLFANSQWML
key: 22
KYVHLZTBSIFNEFWIALJKZEMRQVKEK
key: 23
JXUGKYSARHEMDVENTZKJYLOBLUDJ
key: 24
LWTFJXKZQGLJUGDSYJHIXKPAKTICI
key: 25
HVSEIWQYFCKBCTFKXIGHMBJQZSBIH

```

El resultado con más coherencia en inglés es la 13.

The objective of the exercise is to implement and understand a substitution cipher that allows both encryption and decryption of messages by swapping two alphabets.

The enc function performs a substitution cipher where abc represents the original characters, key the encrypted characters, and str the text to transform. It iterates through abc, replacing each letter with its corresponding one in key(in lowercase) and returns the result in uppercase. By swapping abc and key, the same function can decrypt the text. For example:

with abc="ABCDEFGHIJKLMNOPQRSTUVWXYZ" and key="QWERTYUIOPASDFGHJKLZXCVBNM", encrypting "HELLO WORLD" gives "ITSSG VGKSR", and decrypting "ITSSG VGKSR" returns "HELLO WORLD", proving the function is bidirectional.

```

1 def enc(abc, key, str):
2     for i in range(len(abc)):
3         str = str.replace(abc[i], key[i].lower())
4     str = str.upper()
5     return str
6
7 abc = "ABCDEFGHIJKLMNOPQRSTUVWXYZ"
8
9 #Exercise 1:
10 key = "BVZPMEXSRUAKYIWHOTCFDNJQLG"
11 str = "THERE IS NOTHING IMPOSSIBLE TO THEY WHO WILL TRY"
12 print(enc(abc, key, str))
13
14 #Exercise 2:
15 str = "SEFKWLREHKIF MC WIV KEHSWMSV HTZ CWDZF LY CVSDEV SLOODTMSHWMLT MT WIV KEVCVTSV LY HZQVECHEMVC. MWMTQLAQVC WIV DCV LY QHEMLDC HARLEMWIOC WL VTSLZV HTZ ZVSLZV MTYLEOHWMLT MT H NHF WIHW SHT LTAF JV DTZVECWLLZ JF HDWILEMPVZ KHEWMVC."
16 key = "HJSZVYRIMUBAOTLKXECWDQNGF"
17 print(enc(key, abc, str))
18
19

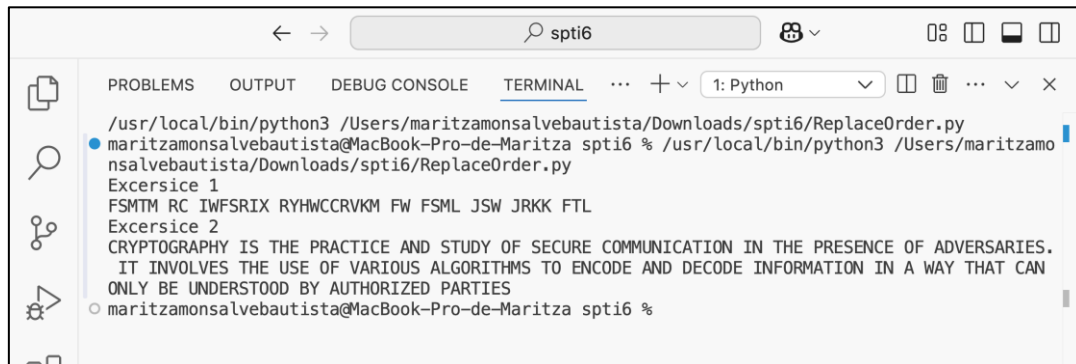
```

- Text: THERE IS NOTHING IMPOSSIBLE TO THEY WHO WILL TRY
- Key: BVZPMEXSRUAKYIWHOTCFDNJQLG

Result: FSMTM RC IWFSRIX RYHWCCRVKM FW FSML JSW JRKK FTL

- Ciphertext: SEFKWLREHKIF MC WIV KEHSWMSV HTZ CWDZF LY CVSDEV SLOODTMSHWMLT MT WIV KEVCVTSV LY HZQVECHEMVC. MWMTQLAQVC WIV DCV LY QHEMLDC HARLEMWIOC WL VTSLZV HTZ ZVSLZV MTYLEOHWMLT MT H NHF WIHW SHT LTAF JV DTZVECWLLZ JF HDWILEMPVZ KHEWMVC.
- Key: HJSZVYRIMUBAOTLKXECWDQNGF

Result: CRYPTOGRAPHY IS THE PRACTICE AND STUDY OF SECURE COMMUNICATION IN THE PRESENCE OF ADVERSARIES. IT INVOLVES THE USE OF VARIOUS ALGORITHMS TO ENCODE AND DECODE INFORMATION IN A WAY THAT CAN ONLY BE UNDERSTOOD BY AUTHORIZED PARTIES



```

/usr/local/bin/python3 /Users/maritzamonsalvebautista/Downloads/spti6/ReplaceOrder.py
maritzamonsalvebautista@MacBook-Pro-de-Maritza spti6 % /usr/local/bin/python3 /Users/maritzamo
nsalvebautista/Downloads/spti6/ReplaceOrder.py
Excercise 1
FSMTM RC IWFSRIX RYHWCCRVMK FW FSML JSW JRKK FTL
Excercise 2
CRYPTOGRAPHY IS THE PRACTICE AND STUDY OF SECURE COMMUNICATION IN THE PRESENCE OF ADVERSARIES.
IT INVOLVES THE USE OF VARIOUS ALGORITHMS TO ENCODE AND DECODE INFORMATION IN A WAY THAT CAN
ONLY BE UNDERSTOOD BY AUTHORIZED PARTIES
maritzamonsalvebautista@MacBook-Pro-de-Maritza spti6 %

```

The objective of this exercise is to develop a program that analyzes the frequency of characters in a given ciphertext and replaces the most common ones based on the standard English letter frequency table. This will help in understanding frequency analysis as a cryptographic technique and how it can be used to decrypt substitution ciphers. Additionally, the program will allow for manual adjustments, reinforcing the process of cryptanalysis and improving decryption accuracy.

The *frequency(alphabet, text)* function calculates the frequency of each letter in the given text. It iterates through each letter of the alphabet, counts its occurrences in the text, and stores the results as a list of pairs [letter, count]. This helps analyze the distribution of characters in the encrypted text.

The *order_frequency(repetitions)* function takes the frequency list generated by the previous function and sorts it in descending order based on the number of occurrences of each letter. This helps identify the most common characters in the text, which is useful for frequency-based decryption techniques.

The *replace_frequency(history_frequencies, text, frequencies)* function automatically replaces the five most frequent letters in the text with the five most common letters in English: E, T, A, O, I. It takes the most repeated letters in the text and substitutes them with the corresponding letters from the history_frequencies list. This is a first step in decrypting the message using frequency analysis.

The *replace_user(text, frequencies)* function allows the user to manually replace the remaining letters in the text. Starting from the sixth most frequent letter, the program asks the user which letter they want to replace it with, displaying the available options. It then updates the text with the changes and continues until all letters have been substituted.

Finally, the `replace_error(text)` function offers the possibility of making additional modifications to the processed text. It asks the user if they want to change any letter, and if they do, it allows them to input the letter to be modified and its replacement. This process repeats until the user decides to stop making changes, ensuring a refined decryption of the message.

```

1 def frequency(alphabet, text):
2     repetitions = []
3     for i in range(len(alphabet)):
4         count = text.count(alphabet[i])
5         repetitions.append([alphabet[i], count])
6     return repetitions
7
8 def order_frequency(repetitions):
9     frequencies = sorted(repetitions, key=lambda x: x[1], reverse=True)
10    return frequencies
11
12 def replace_frequency(history_frequencies, text, frequencies):
13    for i in range(5):
14        letter_replace = frequencies[i][0]
15        letter = history_frequencies[i]
16        text = text.replace(letter_replace, letter.lower())
17    return text
18
19 def replace_user(text, frequencies):
20    remaining = "N S H R D L C U M W F G Y P B V K J X Q Z"
21    for m in range(5, len(frequencies)):
22        print("The letter", frequencies[m][0], "do you want to replace it with:")
23        print(remaining)
24        letter_replace_public = input("Type one of the above options:")
25        letter_replace_public = letter_replace_public.lower()
26        text = text.replace(frequencies[m][0], letter_replace_public)
27        remaining = remaining.replace(letter_replace_public.upper(), '')
28        print(text)
29    return text
30
31 def replace_error(text):
32    print("Desa modificar alguna letra")
33    print("A. Yes      B.No")
34    replace = input("Elige una opción: ")
35    while replace.upper() != "A":
36        letter_replace = input("Ingresa letra a modificar: ")
37        letter_replace_new = input("Por cual desea cambiarla: ")
38        text = text.replace(letter_replace.lower(), letter_replace_new.upper())
39        print(text, flush=True)
40        print("Desa modificar alguna letra")
41        print("A. Yes      B.No")
42        replace = input("Elige una opción: ")
43    return text

```

By frequency we replace G, C, S, H y R for e, t, a, o and the i. Respectively.

```

/usr/local/bin/python3 /Users/maritzamonsalvebautista/Downloads/spti6/frecuencias.py
[[('G', 61), ('C', 41), ('S', 34), ('H', 31), ('R', 29), ('A', 28), ('J', 27), ('T', 25), ('Z', 23), ('L', 18), ('I', 15), ('O', 14), ('M', 10), ('N', 9), ('V', 9), ('B', 8), ('W', 8), ('F', 7), ('U', 7), ('D', 6), ('W', 6), ('P', 5), ('K', 2), ('E', 0), ('Q', 0), ('X', 0)]]
The resulting text after replacing the most repeated letters with E, T, A, O, and I respectively is:
t LAM oZVe tMA, Zi t MtLKY Ota, Ota tWtY... Zo Zi t TtaD oZVe OAa oJe adNeLLZAI, tLoJAMJ oJe TetoJ iota Jti NeEI TeioaAYeT, ZVBeaZtL oaABi JtPe TaZPeI oJe adNeL OAaFeI
OaAV oJeZa JZTTeI Mtie tIT BUsiTeI oJeV tFaAi oJe MtLKY, ePtTZIM oJe TaeTet ZVBeaZL iotaDLeeo, t MaAUB AO OaeTAV OZJDeaI Let MY LUDe iDYWLDea Jti eiOtNLZiJeT t IeW
ieFaao Mtie Ai oJe aeVAoe ZFe WaaLT AO JAoJ. oJe ePZL LAaT TtaoJ PtTea, ANieieT WZoJ OZITZIM YAUIM iDYWLDea, Jti TZiBtoFJeT oJauItITi AO aeVAoe BaANei ZiOa oJe Ota aeTf
Jei AO iBtFe...
The letter A do you want to replace it with:
N S H R D L C U M W F G Y P B V K J X Q Z
Type one of the above options:

```

Then, we start to replace it trying to obtain some frase that make sense. Even if it was complicated, after the replacement we obtain the following text:

“t lmng oske tgm, sn t gtltxy fta, fta twty... so si t dtaq oske fma ohe aebellsmn. tlohmuoh ohe detoh iota hti been deioamyed, skdeastl oammdi htve dasven ohe aebel fmacei famk ohesa hsdden btie tnd duauiued ohek tcamii ohe gtltxy. evtdsng ohe daetded skdeastl iotafleeo, t gamud mf faeedmk fsghoeai led by luqe iqywtlqea hti eiotslihed t new iecaeo btie mn ohe aekmoe sce wmaId mf hmoh. ohe evsl lmad

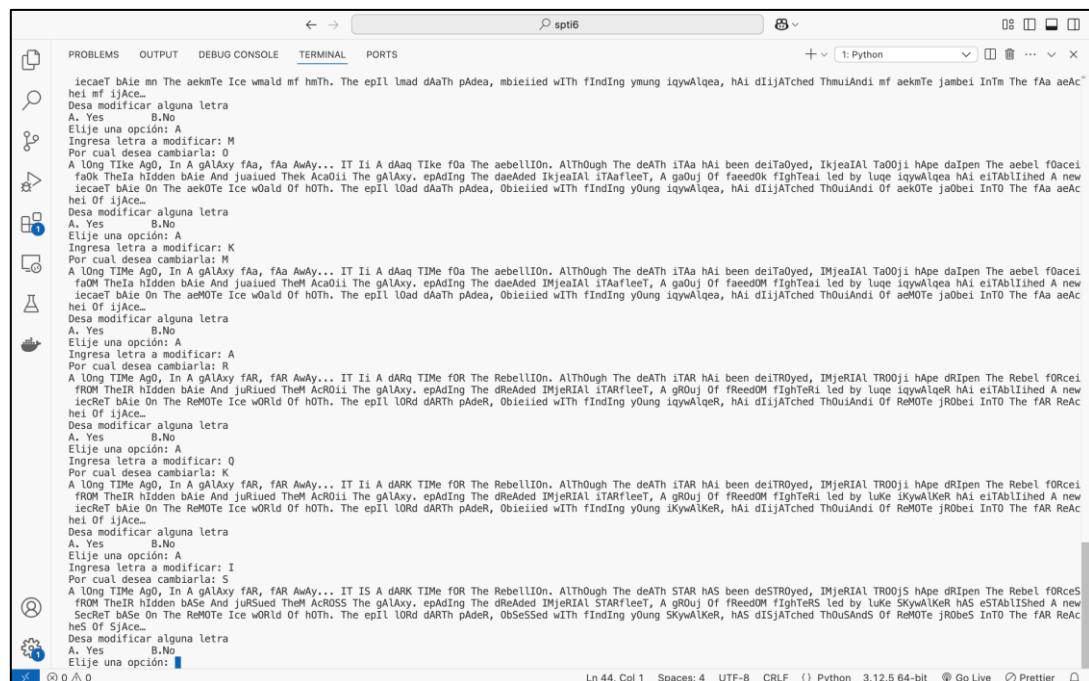
dtah vtdea, mbieiiid wsoh fsndsng ymung iqywtlqea, hti dsidtoched ohmuitndi mf aekmoe dambei snom ohe fta aetchei mf idtce...”

Then we are going to replace until we have something that make sense:

“A lOnG TiME AgO, In A gAlAxY fAR, fAR AwAy... IT IS A dARK TiME fOR The RebelliOn. AlThOugh The deATH STAR hAS been deSTROyed, IMPeRIAl TROOPS hAVe dRIVen The Rebel fORceS fROM TheIR hIdDen bASe And PuRSued TheM AcROSS The gAlAxY. eVAdIng The dReAded IMPeRIAl STARfleeT, A gROuP Of fReedOM fighTeRS led by luKe SKyWAlKeR hAS eSTAbLIshEd A new SecReT bASe On The ReMOTe Ice wORld Of hOTH. The eVIl lORd dARTh VAdEr, ObSeSSed wITH fIndIng yOung SKyWAlKeR, hAS dISpATched ThOuSAndS Of ReMOTe PRObeS InTO The fAR ReAcHeS Of SPACe...”

Where the capital letters were replaced again.

Where the .



```

1: Python
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
lecaeT baie mn The aekmTe Ice wmaId mf hmTh. The epIl lmaD dAaTh pAdea, mbieiiid wITH fIndIng ymung iqyWAlqea, hAi dIiJATched ThmuJAndi mf aekmTe jambei InTa The fAa aeAc
hei mf iJAc...
Desa modificar alguna letra
A. Yes B.No
Elige una opción: A
Ingresar letra a modificar: M
Por cual desea cambiarla: 0
A lOnG TiME AgO, In A gAlAxY fAR, fAR AwAy... IT iI A dAaq TiME fOa The aeBelliOn. AlThOugh The deATH iTAa hAi been deiTaOyed, IkjeaIAl Ta00ji hApe daIpen The aebeI fOaceI
faOk Theia hidden baie And juaiued TheM Aca0ii The gAlAxY. epAdIng The daeAded IMjeaIAl iTARfleeT, A gROuJ Of fReedOM fighTeRi led by luGe iqyWAlqea hAi eiTabLIshEd A new
lecaeT baie On The aekmTe Ice wOald Of hOTH. The epIl lmaD dAaTh pAdea, Obieiiid wITH fIndIng yOung iqyWAlqea, hAi dIiJATched ThOuJAndi Of aeKOTe jAObei InTO The fAa aeAc
hei Of iJAc...
Desa modificar alguna letra
A. Yes B.No
Elige una opción: A
Ingresar letra a modificar: K
Por cual desea cambiarla: M
A lOnG TiME AgO, In A gAlAxY fAR, fAR AwAy... IT iI A dAaq TiME fOa The aeBelliOn. AlThOugh The deATH iTAa hAi been deiTaOyed, IMjeaIAl Ta00ji hApe daIpen The aebeI fOaceI
faOM Theia hidden baie And juaiued TheM Aca0ii The gAlAxY. epAdIng The daeAded IMjeaIAl iTARfleeT, A gROuJ Of fReedOM fighTeRi led by luGe iqyWAlqea hAi eiTabLIshEd A new
lecaeT baie On The aekmTe Ice wOald Of hOTH. The epIl lmaD dAaTh pAdea, Obieiiid wITH fIndIng yOung iqyWAlqea, hAi dIiJATched ThOuJAndi Of aeKOTe jAObei InTO The fAa aeAc
hei Of iJAc...
Desa modificar alguna letra
A. Yes B.No
Elige una opción: A
Ingresar letra a modificar: R
Por cual desea cambiarla: R
A lOnG TiME AgO, In A gAlAxY fAR, fAR AwAy... IT iI A dARq TiME fOR The RebelliOn. AlThOugh The deATH iTAR hAi been deiTROyed, IMjeRIAl TRO0ji hApe dRIpen The Rebel fORceI
fROM TheIR hidden baie And juRiued TheM AcROii The gAlAxY. epAdIng The dReAded IMjeRIAl iTARfleeT, A gROuJ Of fReedOM fighTeRS led by luGe iKyWAlKeR hAi eiTabLIshEd A new
lecaeT baie On The ReMOTe Ice wORld Of hOTH. The epIl lORd dARTh pAdEr, Obieiiid wITH fIndIng yOung iKyWAlKeR, hAi dIiJATched ThOuJAndi Of ReMOTe jRObei InTO The fAR ReAc
hei Of iJAc...
Desa modificar alguna letra
A. Yes B.No
Elige una opción: A
Ingresar letra a modificar: Q
Por cual desea cambiarla: K
A lOnG TiME AgO, In A gAlAxY fAR, fAR AwAy... IT iI A dARK TiME fOR The RebelliOn. AlThOugh The deATH iTAR hAi been deiTROyed, IMPeRIAl TRO0ji hApe dRIpen The Rebel fORceI
fROM TheIR hidden baie And juRiued TheM AcROii The gAlAxY. epAdIng The dReAded IMPeRIAl iTARfleeT, A gROuJ Of fReedOM fighTeRS led by luGe iKyWAlKeR hAi eiTabLIshEd A new
lecaeT baie On The ReMOTe Ice wORld Of hOTH. The epIl lORd dARTh pAdEr, Obieiiid wITH fIndIng yOung iKyWAlKeR, hAi dIiJATched ThOuJAndi Of ReMOTe jRObei InTO The fAR ReAc
hei Of iJAc...
Desa modificar alguna letra
A. Yes B.No
Elige una opción: A
Ingresar letra a modificar: I
Por cual desea cambiarla: S
A lOnG TiME AgO, In A gAlAxY fAR, fAR AwAy... IT IS A dARK TiME fOR The RebelliOn. AlThOugh The deATH STAR hAS been deSTROyed, IMPeRIAl TRO0jS hApe dRIpen The Rebel fORceS
fROM TheIR hidden bASe And juRSued TheM AcROSS The gAlAxY. epAdIng The dReAded IMPeRIAl STARfleeT, A gROuJ Of fReedOM fighTeRS led by luGe SKyWAlKeR hAS eSTAbLIshEd A new
SecReT bASe On The ReMOTe Ice wORld Of hOTH. The epIl lORd dARTh pAdEr, ObSeSSed wITH fIndIng yOung SKyWAlKeR, hAS dISpATched ThOuSAndS Of ReMOTe PRObeS InTO The fAR ReAc
heS Of SPACe...
Desa modificar alguna letra
A. Yes B.No
Elige una opción:

```

```

← → spti6
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
+ v 1: zsh

Ingresar letra a modificar: A
Por cual desea cambiarla: R
A long Time Ago, In A galaxy far, far Away... IT IS A dark Time FOR The Rebellion. ALTHOUGH The deATH iTAR hAI been deITRöyed, IMjERIAL TR00jI hApe dRIPen The Rebel fORceI
FROM Their hidden bAse And juRSued Them ACROSS The gAlaxy. epAdIng The dReAded IMjERIAL iTARfleeT, A gRouP Of fReedOM fighTeRS led by luke jkywAlkeR hAI eITAbLIshed A new
iecreT bAse On The ReMöTe Ice wöRld Of hOTH. The epIl lÖrd dARTH pAdeR, Obieided wITH fIndIng yÖung jkywAlkeR, hAI dIjATched ThöuAndI Of ReMöTe jRöbeI INTO The fAR ReAc
heI Of jJAcE...
Desa modificar alguna letra
A. Yes B.No
Elige una opción: A
Ingresar letra a modificar: Q
Por cual desea cambiarla: K
A long Time Ago, In A galaxy far, far Away... IT IS A dark Time FOR The Rebellion. ALTHOUGH The deATH iTAR hAI been deITRöyed, IMjERIAL TR00jI hApe dRIPen The Rebel fORceI
FROM Their hidden bAse And juRSued Them ACROSS The gAlaxy. epAdIng The dReAded IMjERIAL iTARfleeT, A gRouP Of fReedOM fighTeRS led by luke jkywAlkeR hAI eITAbLIshed A new
iecreT bAse On The ReMöTe Ice wöRld Of hOTH. The epIl lÖrd dARTH pAdeR, Obieided wITH fIndIng yÖung jkywAlkeR, hAI dIjATched ThöuAndI Of ReMöTe jRöbeI INTO The fAR ReAc
heI Of jJAcE...
Desa modificar alguna letra
A. Yes B.No
Elige una opción: A
Ingresar letra a modificar: I
Por cual desea cambiarla: S
A long Time Ago, In A galaxy far, far Away... IT IS A dark Time FOR The Rebellion. ALTHOUGH The deATH STAR HAS been deITRöyed, IMjERIAL TR00jS hApe dRIPen The Rebel fORceS
FROM Their hidden bAse And juRSued Them ACROSS The gAlaxy. epAdIng The dReAded IMjERIAL iTARfleeT, A gRouP Of fReedOM fighTeRS led by luke jkywAlkeR hAI eITAbLIshed A new
iecreT bAse On The ReMöTe Ice wöRld Of hOTH. The epIl lÖrd dARTH pAdeR, ObSeSsed wITH fIndIng yÖung jkywAlkeR, hAI dISjATched ThöuAndS Of ReMöTe jRöbeS INTO The fAR ReAc
heS Of SJAcE...
Desa modificar alguna letra
A. Yes B.No
Elige una opción: A
Ingresar letra a modificar: J
Por cual desea cambiarla: P
A long Time Ago, In A galaxy far, far Away... IT IS A dark Time FOR The Rebellion. ALTHOUGH The deATH STAR HAS been deITRöyed, IMjERIAL TR00PS hApe dRIPen The Rebel fORceS
FROM Their hidden bAse And PuRSued Them ACROSS The gAlaxy. epAdIng The dReAded IMjERIAL iTARfleeT, A gRouP Of fReedOM fighTeRS led by luke jkywAlkeR hAI eITAbLIshed A new
iecreT bAse On The ReMöTe Ice wöRld Of hOTH. The epIl lÖrd dARTH pAdeR, ObSeSsed wITH fIndIng yÖung jkywAlkeR, hAI dISjATched ThöuAndS Of ReMöTe jRöbeS INTO The fAR ReAc
heS Of SPACe...
Desa modificar alguna letra
A. Yes B.No
Elige una opción: A
Ingresar letra a modificar: P
Por cual desea cambiarla: V
A long Time Ago, In A galaxy far, far Away... IT IS A dark Time FOR The Rebellion. ALTHOUGH The deATH STAR HAS been deITRöyed, IMjERIAL TR00PS hApe dRIPen The Rebel fORceS
FROM Their hidden bAse And PuRSued Them ACROSS The gAlaxy. epAdIng The dReAded IMjERIAL iTARfleeT, A gRouP Of fReedOM fighTeRS led by luke jkywAlkeR hAI eITAbLIshed A new
iecreT bAse On The ReMöTe Ice wöRld Of hOTH. The eVil lÖrd dARTH vAdeR, ObSeSsed wITH fIndIng yÖung jkywAlkeR, hAI dISjATched ThöuAndS Of ReMöTe jRöbeS INTO The fAR ReAc
heS Of SPACe...
Desa modificar alguna letra
A. Yes B.No
Elige una opción: B
A long Time Ago, In A galaxy far, far Away... IT IS A dark Time FOR The Rebellion. ALTHOUGH The deATH STAR HAS been deITRöyed, IMjERIAL TR00PS hApe dRIPen The Rebel fORceS
FROM Their hidden bAse And PuRSued Them ACROSS The gAlaxy. epAdIng The dReAded IMjERIAL iTARfleeT, A gRouP Of fReedOM fighTeRS led by luke jkywAlkeR hAI eITAbLIshed A new
iecreT bAse On The ReMöTe Ice wöRld Of hOTH. The eVil lÖrd dARTH vAdeR, ObSeSsed wITH fIndIng yÖung jkywAlkeR, hAI dISjATched ThöuAndS Of ReMöTe jRöbeS INTO The fAR ReAc
heS Of SPACe...
maritzamonsalvabautista@MacBook-Pro-de-Maritza spti6 %
In AA Ctrl-1 Snare: A IITE-R CBI E i3 Duthon 312 K AL.HIT @ Cniva @ Drattier
    
```