

In[11]:= **alphabet = "ABCDEFGHIJKLMNOPQRSTUVWXYZ"**

Out[11]= ABCDEFGHIJKLMNOPQRSTUVWXYZ

In[12]:=

**StringTake[alphabet, {9}] → StringTake[alphabet, {Mod[(9 - 1) + 5, 26] + 1}]**

Out[12]= I → N

In[13]:=

**encrypt5 = Table[StringTake [alphabet, {i}] →  
StringTake[alphabet, {Mod[(i - 1) + 5, 26] + 1} ], {i, 1, 26}]**

Out[13]= {A → F, B → G, C → H, D → I, E → J, F → K, G → L, H → M, I → N, J → O, K → P, L → Q, M → R,  
N → S, O → T, P → U, Q → V, R → W, S → X, T → Y, U → Z, V → A, W → B, X → C, Y → D, Z → E}

In[15]:=

**cleartext = "This is the message i want to encrypt"**

Out[15]= This is the message i want to encrypt

In[16]:=

**cleartext = ToUpperCase[cleartext]**

Out[16]= THIS IS THE MESSAGE I WANT TO ENCRYPT

In[17]:=

**ciphertext = StringReplace[cleartext, encrypt5]**

Out[17]= YMNX NX YMJ RJXXFLJ N BFSY YT JSHWDUY

In[18]:=

**StringReplace ["THIS IS THE MESSAGE I WANT TO ENCRYPT", {  
"A" → "F", "B" → "G", "C" → "H", "D" → "I", "E" → "J", "F" → "K",  
"G" → "L", "H" → "M", "I" → "N", "J" → "O", "K" → "P", "L" → "Q", "M" → "R",  
"N" → "S", "O" → "T", "P" → "U", "Q" → "V", "R" → "W", "S" → "X",  
"T" → "Y", "U" → "Z", "V" → "A", "W" → "B", "X" → "C", "Y" → "D", "Z" → "E"  
}]**

Out[18]= YMNX NX YMJ RJXXFLJ N BFSY YT JSHWDUY

In[19]:=

**decrypt5 = Table[StringTake [alphabet, {i}] →  
StringTake[alphabet, {Mod[(i - 1) - 5, 26] + 1} ], {i, 1, 26}]**

Out[19]= {A → V, B → W, C → X, D → Y, E → Z, F → A, G → B, H → C, I → D, J → E, K → F, L → G, M → H,  
N → I, O → J, P → K, Q → L, R → M, S → N, T → O, U → P, V → Q, W → R, X → S, Y → T, Z → U}

In[20]:=

**StringReplace[ciphertext, decrypt5]**

Out[20]= THIS IS THE MESSAGE I WANT TO ENCRYPT

**"YMNX NX YMJ RJXXFLJ N BFSY YT JSHWDUY"**