

Validation

Well done, but you already have 5 Points

Do not forget to rate this challenge by giving your opinion ;-)

Enter the password:

.....

to send

c)

d) I used the associated resource (ASCII Table) to decode the message.

e) I started on the left and slowly wrote down each letter or number based on the pair of two characters in the string and would highlight what I have already decoded.

2) Pixelated Decomposition (15pts)

a)

✓

Pixelated decomposition

5%

6002

15

Ryscrow

12

Validation

Well done, you won 15 Points

Don't forget to give your opinion on the challenge by voting ;-)

Enter password :

.....

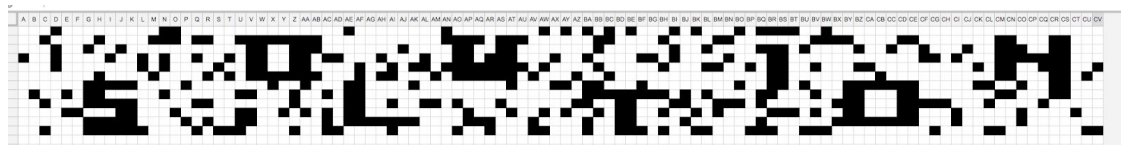
Send

b)

c) Password: SOLUTION

- I used Excel Spreadsheet to illustrate the solution and mark specific pixels.
- I would go line by line and simply mark an X in the boxes needed.
- I used the Fill tool to highlight the X boxes and make the image more apparent.
- This seemed to be the fastest solution to me, as the grid is easy to understand and would be able to manipulate as needed.
- I choose this solution over writing code to illustrate the pixels due to the speed of using Excel. Below is an image of my solution.

vi)






3) Monoalphabetic solution - Caesar (15 pts)

- Solution: ujqcsddessxsffes
- un deux trois

- c) j'irai dans les bois
- d) Quatre cinq six
- e) Cueillir des cerises
- f) Sept huit neuf
- g) dans un panier neuf
- h) dix onze douze
- i) elles seront toutes rouges

j)


Monoalphabetic substitution - Caesar
5%
5865
15

Arod

4

Validation

Well done, you won 15 Points

Don't forget to give your opinion on the challenge by voting ;-)

Enter password :

Send

k)

- l) My solution included writing java code that would shift the alphabet to decode the text. I soon realized that the shift did not equally apply to all of the words as one word would be french and the others still decoded and that each word was shifted by one more than the word to its right.

- m) I used a text document to record my attempts and then used my java code to ultimately find the solution.

```

n) public class Monoalphabeticsub {
    public static void main(String[] args)
    {
        String codedStr1 = "tm bcsv qolfp";
        String codedStr2 = "fdmvd xuhm exl tgak";
        String codedStr3 = "hlrkiv sydg hxm";
        String codedStr4 = "qiswzzwf qrf oqdueqe";
        String codedStr5 = "dpae resd wndo";
        String codedStr6 = "liva bu vgtokx sjzk";
        String codedStr7 = "hmb rqch fqwbg";
        String codedStr8 = "fmmft seront sntsd r pmsecq";
        char[] alphabetArray = {'z','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'};
        char[] caesarArray = {'t','u','v','w','x','y','z','a','b','c','d','e','f','g','h','i','j','k','l','m','n','o','p','q','r','s'};

        for(int i = 0; i< codedStr1.length(); i++) {
            if (codedStr1.charAt(i) != ' ') {
                for(int j =0; j < caesarArray.length; j++) {
                    if(codedStr1.charAt(i)==caesarArray[j]) {
                        System.out.print(alphabetArray[j]);
                    }
                }
            }
            else {
                System.out.print(" ");
            }
        }
    }
}

```

```

    }
}
System.out.println();

for(int i = 0; i < codedStr2.length(); i++) {
    if (codedStr2.charAt(i) != ' ') {
        for(int j = 0; j < caesarArray.length; j++) {
            if(codedStr2.charAt(i) == caesarArray[j]) {
                System.out.print(alphabetArray[j]);
            }
        }
    }
    else {
        System.out.print(" ");
    }
}
System.out.println();

for(int i = 0; i < codedStr3.length(); i++) {
    if (codedStr3.charAt(i) != ' ') {
        for(int j = 0; j < caesarArray.length; j++) {
            if(codedStr3.charAt(i) == caesarArray[j]) {
                System.out.print(alphabetArray[j]);
            }
        }
    }
    else {
        System.out.print(" ");
    }
}
System.out.println();

for(int i = 0; i < codedStr4.length(); i++) {
    if (codedStr4.charAt(i) != ' ') {
        for(int j = 0; j < caesarArray.length; j++) {
            if(codedStr4.charAt(i) == caesarArray[j]) {
                System.out.print(alphabetArray[j]);
            }
        }
    }
    else {
        System.out.print(" ");
    }
}
System.out.println();

for(int i = 0; i < codedStr5.length(); i++) {
    if (codedStr5.charAt(i) != ' ') {
        for(int j = 0; j < caesarArray.length; j++) {
            if(codedStr5.charAt(i) == caesarArray[j]) {
                System.out.print(alphabetArray[j]);
            }
        }
    }
    else {
        System.out.print(" ");
    }
}
System.out.println();
for(int i = 0; i < codedStr6.length(); i++) {


```

```

        if (codedStr6.charAt(i) != ' ') {
            for(int j =0; j < caesarArray.length; j++) {
                if(codedStr6.charAt(i)==caesarArray[j]) {
                    System.out.print(alphabetArray[j]);
                }
            }
        }
        else {
            System.out.print(" ");
        }
    }
    System.out.println();
    for(int i = 0; i< codedStr7.length(); i++) {
        if (codedStr7.charAt(i) != ' ') {
            for(int j =0; j < caesarArray.length; j++) {
                if(codedStr7.charAt(i)==caesarArray[j]) {
                    System.out.print(alphabetArray[j]);
                }
            }
        }
        else {
            System.out.print(" ");
        }
    }
    System.out.println();
    for(int i = 0; i< codedStr8.length(); i++) {
        if (codedStr8.charAt(i) != ' ') {
            for(int j =0; j < caesarArray.length; j++) {
                if(codedStr8.charAt(i)==caesarArray[j]) {
                    System.out.print(alphabetArray[j]);
                }
            }
        }
        else {
            System.out.print(" ");
        }
    }
    System.out.println();
}
}

```

4) Transposition - Rail Fence


Transposition - Rail Fence
3%
2407
20

YellowS4

5

Validation

Well done, you win 20 Points

Do not forget to rate this challenge by giving your opinion :-)

Enter the password:

b) Password: Frozen Chicken

- c) To solve this, I first researched rail fence in relation to cipher and realized that it was a cipher that involved writing the message down and up depending on the variation amount. I decided to use Excel to draw out the variations as I figured that this would be the quickest. I tried to layout some key words like invade and then match the pattern to that.

	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	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO							
1	Wnb.r.ietoeh Fo'lKutrts'zni cc hi ee ekOtggnskidy hini cna neea civo lh																																															
2	W														N														B																			
3		I												E		T													O		E																	
4			L										K			U													T		R																T	
5				L													C												C																		H	
6														E				K											O																		G	
7						I																																										
8							N			A																																						
9								V																																								
10																																																
11																																																
12																																																
13																																																

d)