

# Lab 10- Classical Encryption Techniques

## Substitution Techniques

### 1- Playfair Cipher:

- Encrypt this plaintext **Ballon**

<b>M</b>	<b>O</b>	<b>N</b>	<b>A</b>	<b>R</b>
<b>C</b>	<b>H</b>	<b>Y</b>	<b>B</b>	<b>D</b>
<b>E</b>	<b>F</b>	<b>G</b>	<b>J/I</b>	<b>K</b>
<b>L</b>	<b>P</b>	<b>Q</b>	<b>S</b>	<b>T</b>
<b>U</b>	<b>V</b>	<b>W</b>	<b>X</b>	<b>Z</b>

### 2- Ceaser Cipher:

- Encrypt this plaintext **Attack** with key = 4

<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>
<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>	<b>H</b>	<b>I</b>	<b>J</b>	<b>K</b>	<b>L</b>	<b>M</b>	<b>N</b>

<b>14</b>	<b>15</b>	<b>16</b>	<b>17</b>	<b>18</b>	<b>19</b>	<b>20</b>	<b>21</b>	<b>22</b>	<b>23</b>	<b>24</b>	<b>25</b>
<b>O</b>	<b>P</b>	<b>Q</b>	<b>R</b>	<b>S</b>	<b>T</b>	<b>U</b>	<b>V</b>	<b>W</b>	<b>X</b>	<b>Y</b>	<b>Z</b>

**3- Monoalphabetic Cipher:**

- Use this word **Mosque** and encrypt it with key **Yasmin**

**4- Vigenère Cipher:**

- Encrypt this plaintext **Congratulations** with key **Nada**

0	1	2	3	4	5	6	7	8	9	10	11	12	13
A	B	C	D	E	F	G	H	I	J	K	L	M	N

  

14	15	16	17	18	19	20	21	22	23	24	25
O	P	Q	R	S	T	U	V	W	X	Y	Z

## Transposition Technique

**5- Rail Fence Cipher:**

- Encrypt this plaintext **Cryptography** with depth **3**

**6- Columnar Cipher:**

- Encrypt this plaintext **Entrepreneurship** with key **5 2 1 4 3**