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Subject : Information Security And Cyber laws

Course : BCA (B) VI Sem

Roll No : 11211130 (49)

Exam type : Regular (Practical Exam)

Q3

```
def generateKey(string, Key):
    Key = list(Key)
    if len(string) == len(Key):
        return(Key)

    else:
        for i in range(len(string) - len(Key)):
            Key.append(Key[i % len(Key)])

    return("".join(Key))

def cipherText(string, Key):
    cipher_text = []
    for i in range(len(string)):
        x = (ord(string[i]) + ord(Key[i])) % 26
        x += ord('A')
        cipher_text.append(chr(x))
    return("".join(cipher_text))

def originalText(cipher_text, Key):
    orig_text = []
    for i in range(len(cipher_text[illegible])):
        x = (ord(cipher_text[i]) - ord(Key[i]
            + 26) % 26
        x += ord('A')
```

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        orig_text.append(chr(x))
    return("".join(orig_text))

if __name__ == "__main__":
    string = "Cryptography"
    Keyword = "Monarchy"
    Key = generateKey(string, Keyword)
    cipher_text = cipherText(string, Key)
    print("Ciphertext:", Cipher_text)
    print("Original/Decrypted Text:", originalText
                (cipher_text, Key))
```

Gaurav