

Sankar Pokhriyal

BCA - 6<sup>th</sup> - B

1121126 (45)

PBC - 601

F. Name - Shyam Singh.

~~Sankar~~

classmate

Date \_\_\_\_\_

Page \_\_\_\_\_

Ans →

```
# import library
import math, random
```

```
# function to generate OTP
def generateOTP():
```

```
# Declare a digits variable
```

```
# which stores all digits
```

```
digits = '0123456789'
```

```
OTP = ""
```

```
# length of password can be changed
```

```
# by changing value in range
```

```
for i in range(4):
```

```
    OTP += digits[math.floor(random.random()*10)]
```

```
return OTP
```

```
# Driver code
```

```
if __name__ == "__main__":
```

```
    print("OTP of 4 digits:", generateOTP())
```



Saukalp Pokhriyal

BCAG-B

1121126 (45)

PBC - 601

F. Name - Shyam Singh  
classmate

Ausky

Date \_\_\_\_\_  
Page \_\_\_\_\_

### Caesar Cipher

# A python program to illustrate Caesar Cipher Technique

```
def encrypt (text, s);  
    result = ""
```

```
# traverse text
```

```
for i in range (len (text)):  
    char = text [i]
```

```
    if (char.isupper()):  
        result += chr ((ord (char) + s - 65) % 26 + 65)
```

```
    else:
```

```
        result += chr ((ord (char) + s - 97) % 26 + 97)
```

```
return result
```

```
text = "Attack from north"
```

```
s = 4
```

```
print "text:" + text
```

```
print "shift:" + str (s)
```

```
print "cipher" + encrypt (text, s)
```



Saukay Pokhriyal

BCA - 6 - B

1121126 (45)

PBC - 601

R. Name - Shyam Singh  
classmate

Date

Page

Saukay

## Vigenere Cipher

Ans3.

```
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 originalText (cipher_text, Key):
```

```
    orig_text = []
```

```
    for i in range (len (cipher_text)):
```

```
        x = (ord (cipher_text [i])
```

```
              ord (Key [i] + 26) % 26
```

```
              x + ord ('A')).
```

```
    return (" " . join (orig_text)).
```

```
..).
```

```
if __name__ == "__main__":
```

```
    string = "BCAB"
```

```
    keyword = "Saukay"
```

```
    Key = generateKey (string, keyword)
```

```
    cipher_text = cipherText (string, Key)
```

```
    print ("CipherText:", cipher_text)
```

```
    print ("Original Text:", originalText (cipher_text,  
                                             Key)).
```