PYTHON EXERCISE-1

1.FizzBuzz Challenge

Print numbers from 1 to 50:

If divisible by 3, print "Fizz"

If divisible by 5, print "Buzz"

If divisible by both, print "FizzBuzz"

Else, print the number

CODE:

```python
for i in range(1, 51):
    if i % 3 == 0 and i % 5 == 0:
        print("FizzBuzz")
    elif i % 3 == 0:
        print("Fizz")
    elif i % 5 == 0:
        print("Buzz")
    else:
        print(i)
```

2. Login Simulation (Max 3 Attempts)

Ask for a username and password. Allow maximum 3 attempts to enter the correct

values (admin / 1234). After 3 wrong tries, print "Account Locked" .

CODE:

```python
username="admin"
password="1234"
for chance in range(3):
    user=input("Enter username:")
    pwd=input("Enter password:")
    if user==username and pwd==password:
```

```
        print("Login successfull")
        break
    else:
        print("Wrong try again")
else:
    print("Account Locked")
```

3. Palindrome Checker

Ask the user to input a word. Print whether the word is a palindrome (reads same

forward & backward).

CODE:

```
word=input("Enter a word:")
if word==word[::-1]:
    print("It is a palindrome")
else:
    print("It is not a palindrome")
```

4. Prime Numbers in a Range

Ask user for a number n and print all prime numbers from 1 to n .

CODE:

```
n=int(input("Enter a number:"))
print("Prime numbers from 1 to", n, ":")
for num in range(2,n+1):
    for i in range(2,num):
        if num%i==0:
            break
    else:
        print(num)
```

5. Star Pyramid

Use a for loop to print a triangle of stars:

CODE:

```
rows = int(input("Enter number of rows: "))
```

```
for i in range(1, rows + 1):

    print("*" * i)
```

6. Sum of Digits

Ask the user to input a number like 456 Output should be 4 + 5 + 6 = 15

CODE:

```
number=int(input("Enter a number:"))
sum=0
while number > 0:
    digit=number%10
    sum+=digit
    number=number//10
print("Sum of digits =",sum)
```

7. Multiplication Table Generator

Ask user for a number, print its multiplication table up to 10.

CODE:

```
num=int(input("Enter a number:"))
print("Multiplication table of",num)
for i in range(1,11):
    print(num,"x",i,"=",num*i)
```

8. Count Vowels in a String

Ask user to enter a sentence. Print total number of vowels (a, e, i, o, u)

present.

CODE:

```
sentence=input("Enter a sentence:")
vowels="aeiouAEIOU"
count=0
for letter in sentence:
    if letter in vowels:
        count+=1
print("Number of vowels=",count)
```