OBJECT ORIENTED PROGRAMMING USING PYTHON
LAB FILE

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SCHOOL OF COMPUTER APPLICATIONS

1. Calculate number of days between two dates

Code - from datetime import date

```python
# Take input from user
y1, m1, d1 = map(int, input("Enter first date (YYYY MM DD): ").split())
y2, m2, d2 = map(int, input("Enter second date (YYYY MM DD): ").split())

# Create date objects
date1 = date(y1, m1, d1)
date2 = date(y2, m2, d2)
print(f"Number of days between: {delta.days} days")

# Difference
delta = abs(date2 - date1)
```

```
Enter first date (YYYY MM DD): 2007 07 23
Enter second date (YYYY MM DD): 2032 09 23
Number of days between: 9194 days
```

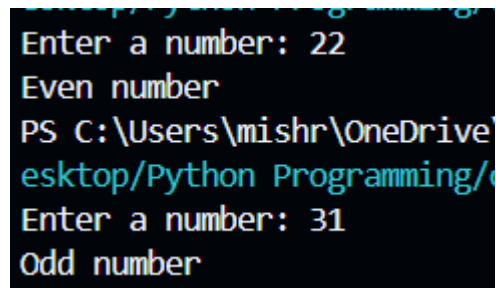2. Write a Python program that accepts an integer (n) and computes the value of n+nn+nnn

Code -
```python
n = int(input("Enter an integer: "))
result = n + int(str(n)*2) + int(str(n)*3)
print("Result:", result)
```

```
Enter an integer: 23
Result: 234669
```

3. Ask the user for a number. Depending on whether the number is even or odd, print out an appropriate message to the user. Hint: how does an even / odd number react differently when divided by 2?

Code - num = int(input("Enter a number: "))

```python
if num % 2 == 0:
    print("Even number")
else:
    print("Odd number")
```

```
Enter a number: 22
Even number
PS C:\Users\mishr\OneDrive
esktop/Python Programming/
Enter a number: 31
Odd number
```

4. Write a Python program which accepts a sequence of comma-separated numbers from user and generate a list and a tuple with those numbers.

```python
values = input("Enter comma-separated numbers: ")

# Split into list
list_values = values.split(",")

# Convert to tuple
tuple_values = tuple(list_values)

print("List:", list_values)
print("Tuple:", tuple_values)
```

```
Enter comma-separated numbers: 21,43,21,89,082,928,55,55,7253,8253
List: ['21', '43', '21', '89', '082', '928', '55', '55', '7253', '8253']
Tuple: ('21', '43', '21', '89', '082', '928', '55', '55', '7253', '8253')
```

5. Write a Python program to calculate the sum of three given numbers, if the values are equal then return thrice of their sum.

Code -
```python
def sum_three(a, b, c):
    total = a + b + c
    if a == b == c:
        return total * 3
    return total


# Taking input from user
a, b, c = map(int, input("Enter three numbers separated by space: ").split())

# Calling function and printing result
print("Result:", sum_three(a, b, c))
```
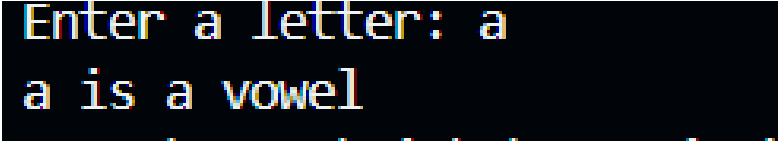
```
Enter three numbers separated by space: 4 5 6
Result: 15
```

6. Write a Python program to test whether a passed letter is a vowel or not

Code- letter = input("Enter a letter: ").lower()

```python
if letter in 'aeiou':
    print(f"{letter} is a vowel")
else:
    print(f"{letter} is not a vowel")
```

```
Enter a letter: a
a is a vowel
```