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[Laboratory 3 - TH](#)

Exercise Set 3: Expressions and Problem Solving

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ENGR 1330 ES-3 - Homework

```
In [28]: # Preamble script block to identify host, user, and kernel
import sys
! hostname
! whoami
print(sys.executable)
print(sys.version)
print(sys.version_info)
```

```
DESKTOP-6HAS1BN
desktop-6has1bn\medra
C:\Users\medra\anaconda3\python.exe
3.8.5 (default, Sep 3 2020, 21:29:08) [MSC v.1916 64 bit (AMD64)]
sys.version_info(major=3, minor=8, micro=5, releaselevel='final', serial=0)
```

Exercise 1: Odd/Even

Depending on whether the number is even or odd, print out an appropriate message to the user.

Use the following cases to test your script:

- Case 1: number=33
- Case 2: number=44

Bonus(Optional):

- If the number is a multiple of 4, print out a different message.
- Supply two numbers: one number to check (call it `num`) and one number to divide by (`check`). If `check` divides evenly into `num`, tell that to the user. If not, print a different appropriate message.

```
In [29]: # put your Case 1 code here
num = 33
if((num % 2) == 0):
    print(num, 'turns out to be a even number!')
else:
    print(num, 'turns out to be an odd number!')
```

```
33 turns out to be an odd number!
```

```
In [30]: # put your Case 2 code here
num = 44
if((num % 2) == 0):
    print(num, 'turns out to be a even number!')
else:
    print(num, 'turns out to be an odd number!')
```

44 turns out to be a even number!

```
In [31]: num = int(input('PLEASE ENTER A NUMBER SO WE CAN CHECK IF ITS EVEN OR ODD: '))
if((num % 2) == 0):
    print(num, 'turns out to be a even number!')
else:
    print(num, 'turns out to be an odd number!')
```

19 turns out to be an odd number!

bonus

```
In [32]: num = int(input('PLEASE ENTER A NUMBER SO WE CAN CHECK IF ITS EVEN OR ODD: '))
check = num % 4
if(check == 0):
    print(num, 'is divisible by 4')
if((num % 2) == 0):
    print(num, 'turns out to be a even number!')
else:
    print(num, 'turns out to be an odd number!')
```

32 is divisible by 4
32 turns out to be a even number!

Exercise 2: Number Manipulation

Create a script that accepts an integer (n) as input and computes the value of $n+nn+nnn$. For example for an input value of $n = 5$ the required result is 615 obtained from $5+55+555$

Use the following cases to test your script:

- Case 1: $n=1$
- Case 2: $n=6$

Bonus(Optional):

- Modify the script to accept multi-digit values, and test with $n=33$

```
In [33]: # put your Case 1 code here
start = 1
num = str(start)

num1 = num
num2 = num + num
num3 = num + num + num
```

```
total = (int(num1) + int(num2) + int(num3))  
print(total)
```

123

```
In [34]: # put your Case 2 code here  
start = 6  
num = str(start)  
  
num1 = num  
num2 = num + num  
num3 = num + num + num  
total = (int(num1) + int(num2) + int(num3))  
print(total)
```

738

```
In [35]: start = input('Please Enter a number to be computed: ')  
num = str(start)  
  
num1 = num  
num2 = num + num  
num3 = num + num + num  
total = (int(num1) + int(num2) + int(num3))  
print(total)
```

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