



Department of Computing Technologies

SRM IST, Kattankulathur – 603 203

Course Code: 18CSC207J

Course Name: Advanced Programming Practice

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| Experiment No | Hackerrank-01 |
| Title of Experiment | To complete 4 Hackerrank python programs |
| Name of the Student | Abhijay Rajvansh (RA2011003010398) |
| Date of Experiment | 6 - 04 - 2022 |

Staff Signature with date

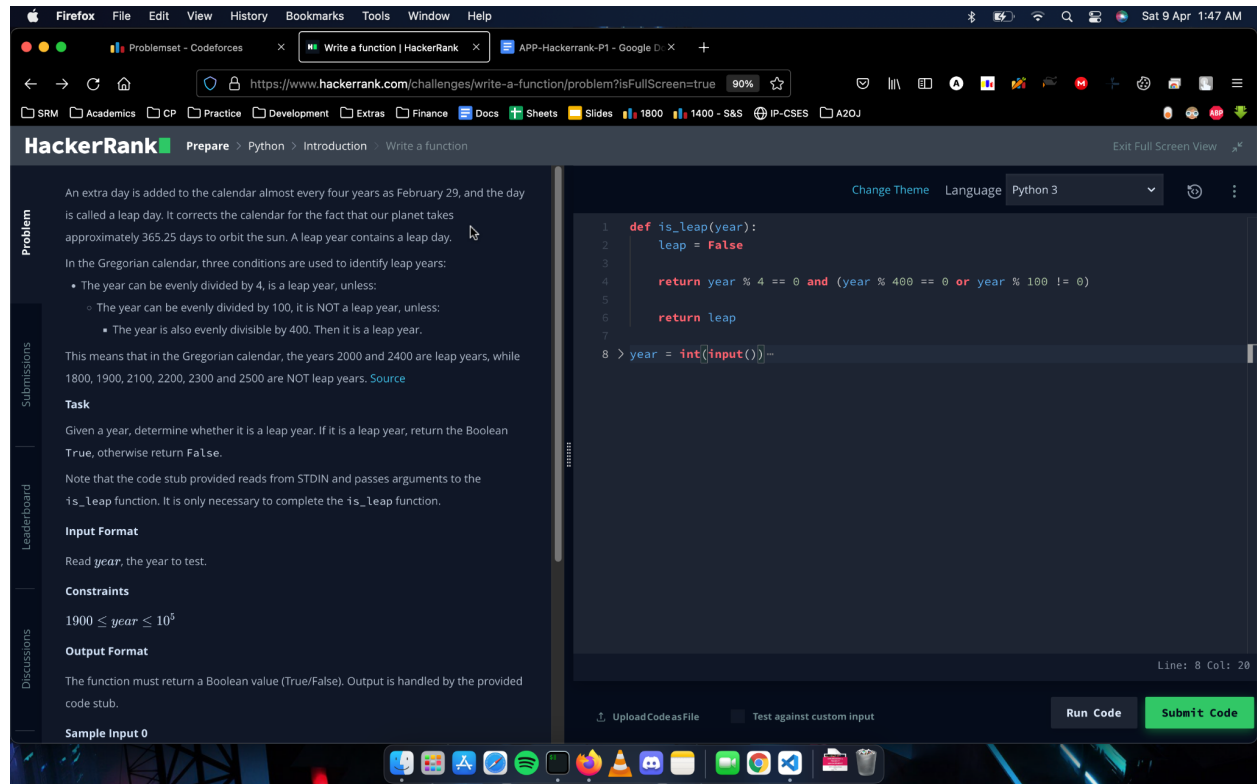
1.

Aim: Given a year, determine whether it is a leap year. If it is a leap year, return the Boolean True, otherwise return False.

Note that the code stub provided reads from STDIN and passes arguments to the `is_leap` function. It is only necessary to complete the `is_leap` function.

CODE:

```
def is_leap(year):  
    leap = False  
  
    return year % 4 == 0 and (year % 400 == 0 or year % 100 != 0)  
  
    return leap
```



Result: Hackerrank python program was completed.

2.

Aim:

Task

The provided code stub reads and integer, n , from STDIN. For all non-negative integers $i < n$, print i^2 .

Example

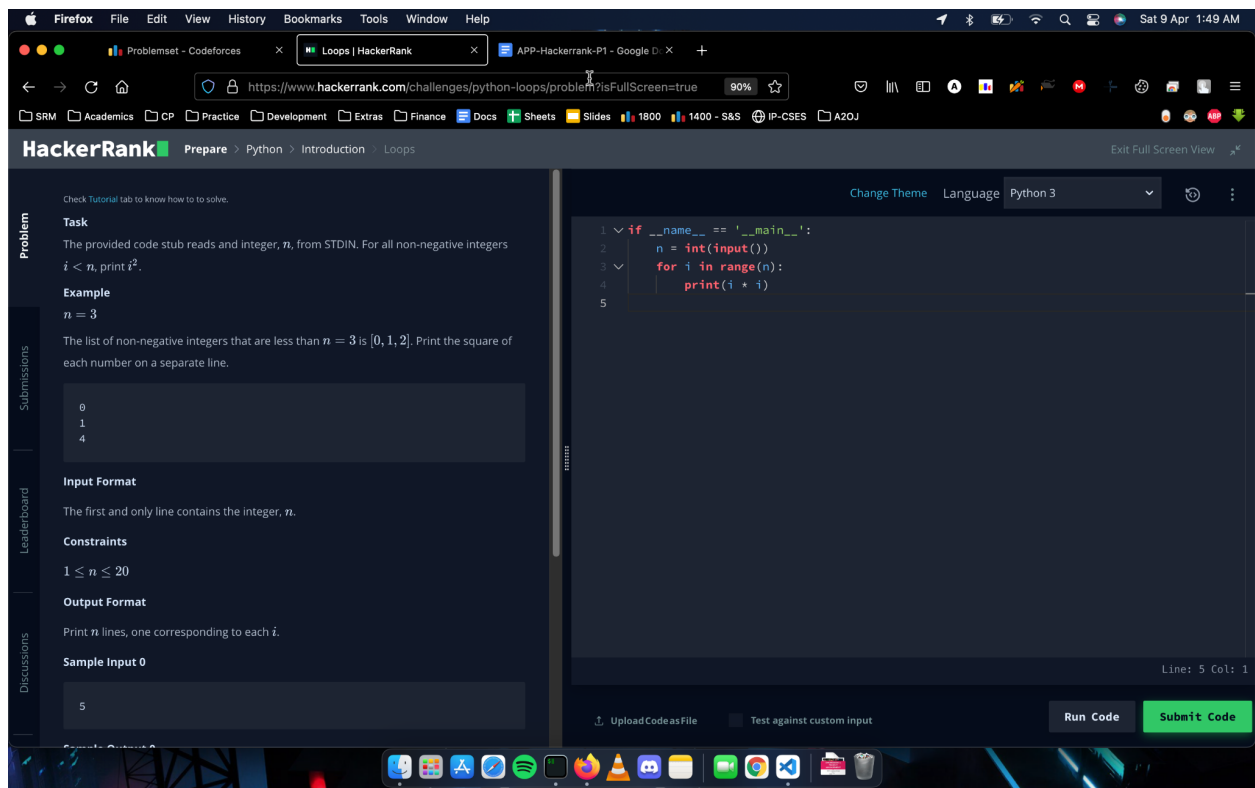
$n = 3$

The list of non-negative integers that are less than $n = 3$ is $[0, 1, 2]$. Print the square of each number on a separate line.

```
0
1
4
```

CODE:

```
if __name__ == '__main__':
    n = int(input())
    for i in range(n):
        print(i * i)
```



Result: Hackerrank python program was completed.

3.

Aim:

Task

The provided code stub reads two integers, a and b , from STDIN.

Add logic to print two lines. The first line should contain the result of integer division, $a // b$. The second line should contain the result of float division, a / b .

No rounding or formatting is necessary.

Example

$a = 3$

$b = 5$

- The result of the integer division $3 // 5 = 0$.
- The result of the float division is $3 / 5 = 0.6$.

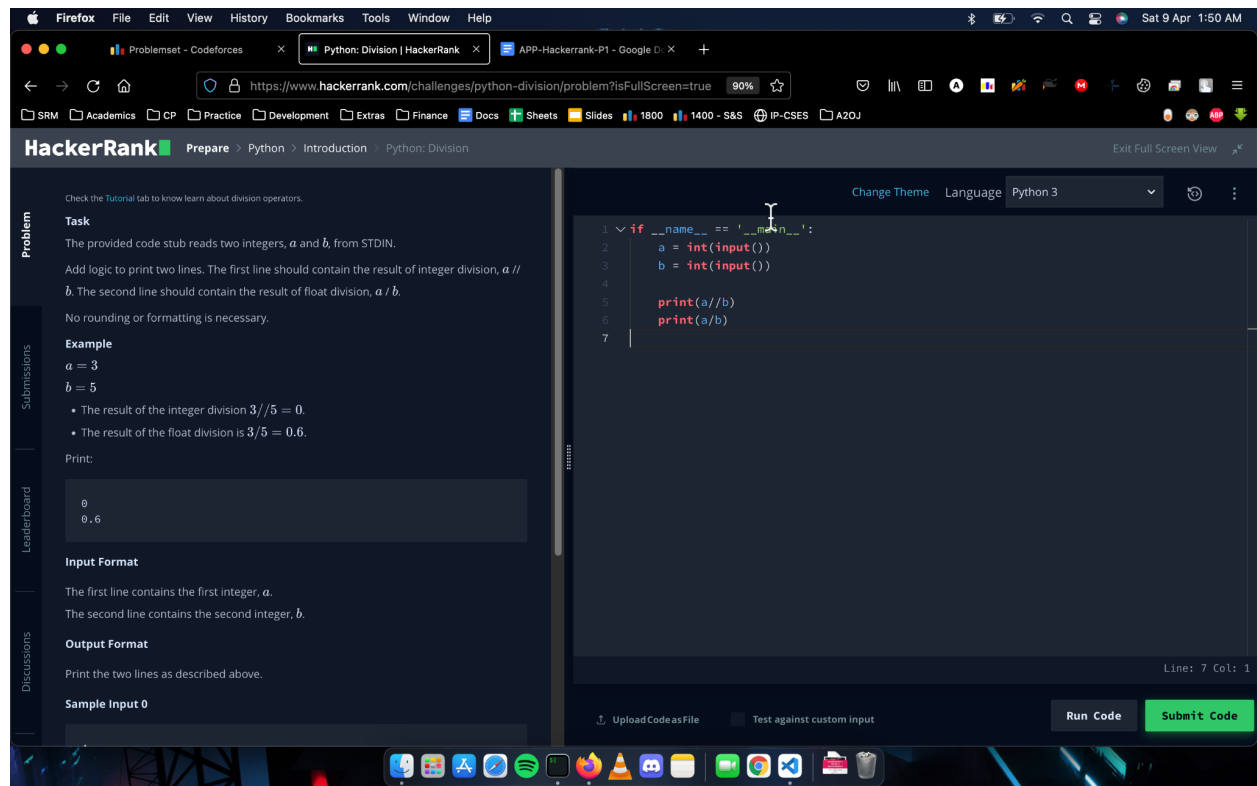
Print:

```
0
0.6
```

CODE:

```
if __name__ == '__main__':
    a = int(input())
    b = int(input())

    print(a//b)
    print(a/b)
```



Result: Hackerrank python program was completed.

4.

Aim:

Task

Given an integer, n , perform the following conditional actions:

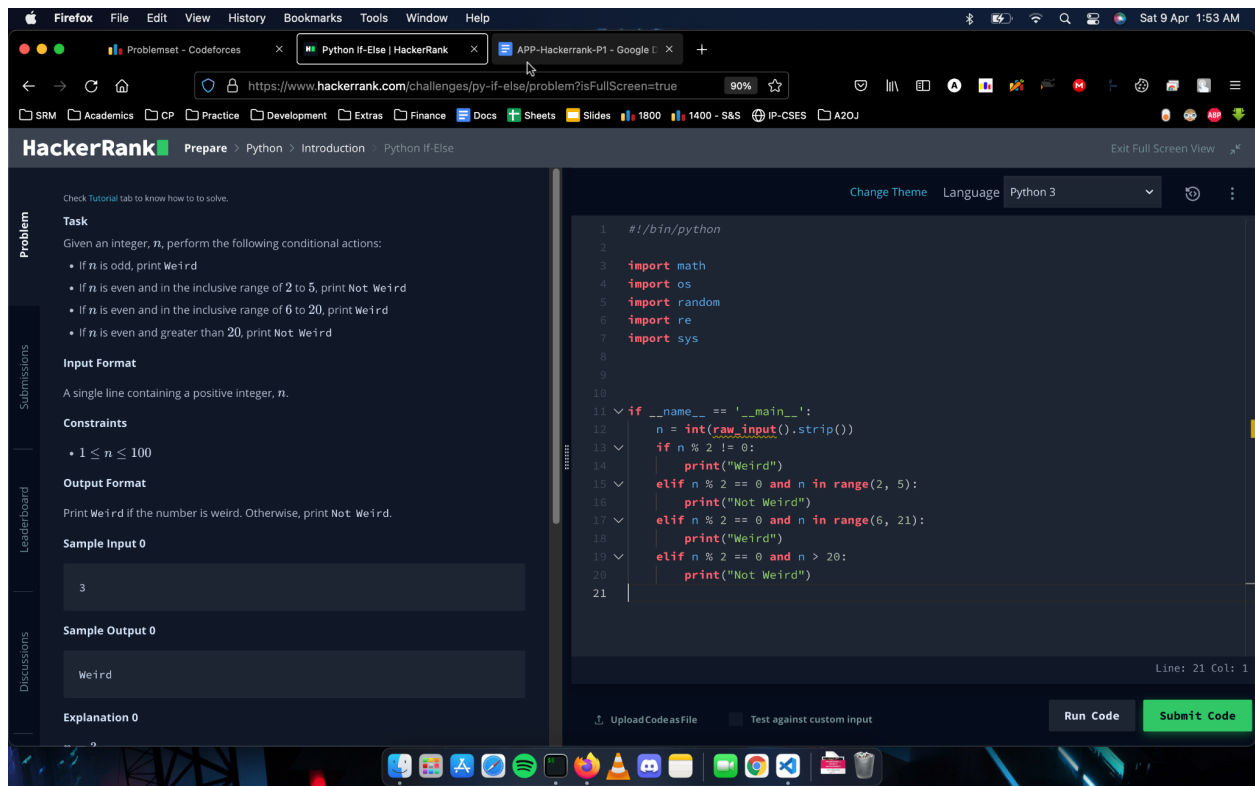
- If n is odd, print `Weird`
- If n is even and in the inclusive range of 2 to 5, print `Not Weird`
- If n is even and in the inclusive range of 6 to 20, print `Weird`
- If n is even and greater than 20, print `Not Weird`

Input Format

A single line containing a positive integer, n .

CODE:

```
if __name__ == '__main__':  
    n = int(raw_input().strip())  
    if n % 2 != 0:  
        print("Weird")  
    elif n % 2 == 0 and n in range(2, 5):  
        print("Not Weird")  
    elif n % 2 == 0 and n in range(6, 21):  
        print("Weird")  
    elif n % 2 == 0 and n > 20:  
        print("Not Weird")
```

Result: Hackerrank python program was completed.