Leetcode May Challenge DAY: 04

1. **Python**

```python
class Solution:
    def findComplement(self, num: int) -> int:
        mask = 1
        while mask < num:
            mask = (mask << 1) + 1
        return num ^ mask
```

2. C++

```cpp
int findComplement(int num) {

    int x = 1;

    while(num > x)

        x = x*2+1;

    return  x- num;

}
```
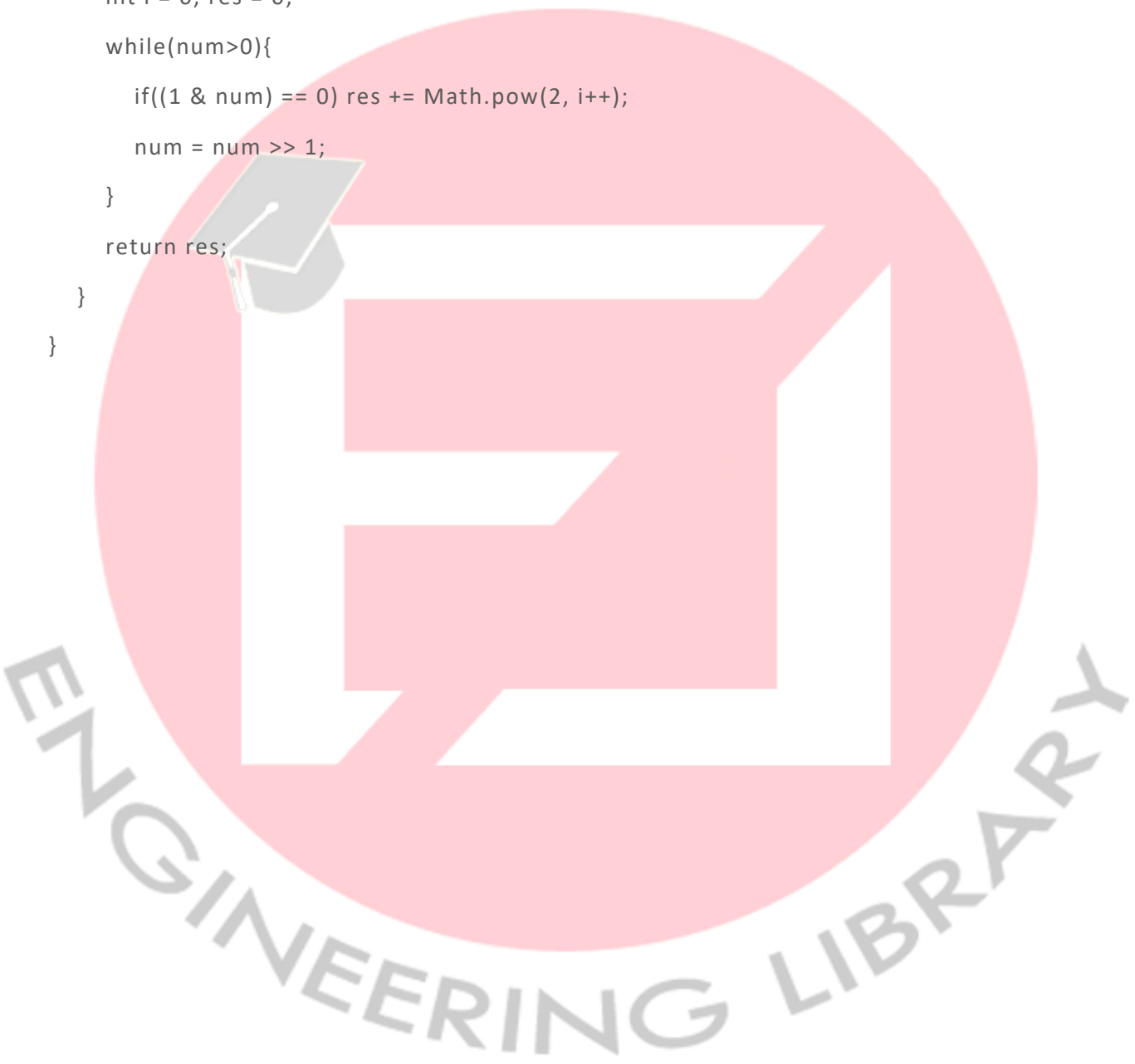
3. JAVA

```java
class Solution {
    public int findComplement(int num) {
        int i = 0, res = 0;
        while(num>0){
            if((1 & num) == 0) res += Math.pow(2, i++);
            num = num >> 1;
        }
        return res;
    }
}
```