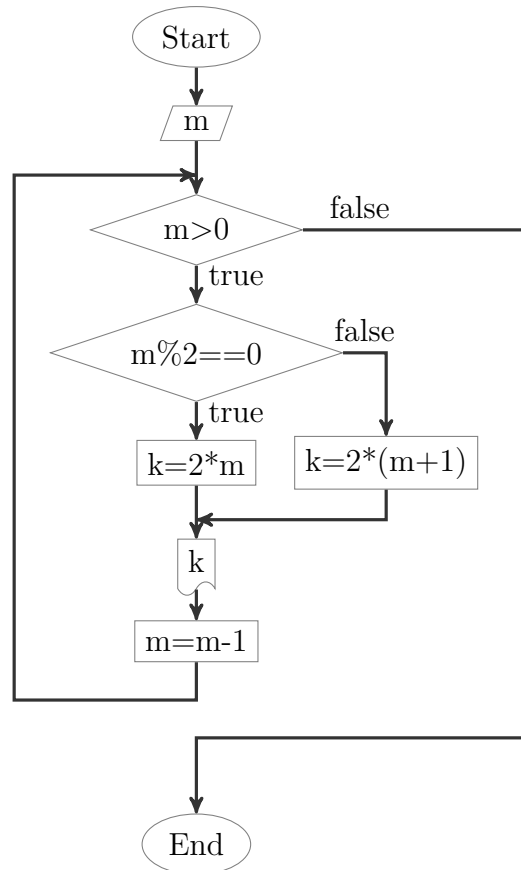


Name: \_\_\_\_\_

Translate the following diagram in **code**.

All the variables are natural.



Read carefully the problem, then identify the important parts, make a **model**, and a **flow chart**. Remember to describe all the passages that brings you to give a certain answer (why a certain value is an input, where you found information on the data type, why you made a certain choice, etc...). After that write the corresponding **code** of the flow chart.

Write a program that read a natural number “ $i$ ” and calculate and write the sum:

$$2 + 2^2 + 2^3 + \cdots + 2^i$$