**Math314**

**Binary Modular Exposentiation**

**ABDULRAHMAN NASSER ALSAYKHAN**

**371109436**

**def** power(a, b, p):  
 result = 1  
  
 a = a % p  
  
 **if** (a == 0):  
 **return** 0  
  
 **while** (b > 0):  
  
 **if** ((b & 1) == 1):  
 result = (result \* a) % p  
  
 b = b >> 1 a = (a \* a) % p  
  
 **return** result  
  
  
a = 50;  
b = 100;  
p = 13  
print(**"The Power is :"**, power(a, b, p))

A screenshot of a cell phone

Description automatically generated

A screenshot of a computer

Description automatically generated