def waysToPaint(n):

# Count of ways to pain a

# row with same colored ends

same = 6

# Count of ways to pain a row

# with different colored ends

diff = 6

# Traverse up to (N - 1)th row

for \_ in range(n - 1):

# Calculate the count of ways

# to paint the current row

# For same colored ends

sameTmp = 3 \* same + 2 \* diff

# For different colored ends

diffTmp = 2 \* same + 2 \* diff

same = sameTmp

diff = diffTmp

print(same)

print(diff)

# Print the total number of ways

print(same + diff)

# Driver Code

N = int(input())

waysToPaint(N)