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# Module 2 project

# ----------------------Tribonacci function---------------------------------
# Tribo functions params: n is position of

def tribo(n):
    a, b, c = 1, 1, 1
    # Base case
    if n == 0:
        return 0
    # 2nd base case
    elif n == 1 or n ==2:
        return 1
    # for loop to calculate the correct position in the tribonaci sequence
    for i in range(3, n + 1):
        a, b, c = b, c, a + b + c
    return c

# ------------------------
Main-------------------------------------------------------------
def main():

    while True:
        try:
            # user input-----------------------------
            inp = int((input("enter a number for positon for tribonacci (enter to
00 to terminate): ").strip()))
            # terminate program code---------------------------------
            if inp < 0:
                print("program terminated")
                break
            # Calculates correct position in array
            inp2 = inp - 1

            print(f"the {inp} position of tribonacci sequence is {tribo(inp2)}")
        except ValueError:
            print("Please enter an integer greater than 0")

#
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if __name__ == "__main__":
    main()


# fib 0, 1, 1, 2, 3, 5, 8, 13, 21, 34, 55, 89, 144
# trib 0, 0, 1, 1, 2, 4, 7, 13, 24
```