def calculate\_gpa():

total\_credit\_hours = 0.0

total\_grade\_points = 0.0

print("\nGPA Calculator for 6 Courses")

print("---------------------------")

print("Valid grades: A (5.0), B (4.0), C (3.0), D (2.0), F (0.0)\n")

grade\_points = {

'A': 5.0,

'B': 4.0,

'C': 3.0,

'D': 2.0,

'F': 0.0

}

for course\_num in range(1, 7):

while True:

try:

print(f"\nCourse {course\_num}:")

credit\_hours = float(input("Enter credit hours (e.g., 3.0): "))

if credit\_hours <= 0:

print("Error: Credit hours must be positive. Please try again.")

continue

grade = input("Enter letter grade: ").upper()

if grade not in grade\_points:

print("Error: Invalid grade. Please enter A, B, C, D, or F.")

continue

course\_points = credit\_hours \* grade\_points[grade]

total\_credit\_hours += credit\_hours

total\_grade\_points += course\_points

break

except ValueError:

print("Error: Please enter a valid number for credit hours.")

if total\_credit\_hours > 0:

gpa = total\_grade\_points / total\_credit\_hours

print(f"\nResults:")

print(f"Total Credit Hours: {total\_credit\_hours}")

print(f"Total Grade Points: {total\_grade\_points}")

print(f"Your GPA is: {gpa:.2f}")

else:

print("\nNo valid courses entered. GPA cannot be calculated.")

if \_\_name\_\_ == "\_\_main\_\_":

calculate\_gpa()