Thursday, July 27, 2023
2:09 PM

```
def calculate_grade(marks):
    if marks >= 90:
        return 'A+'
    elif 80 <= marks < 90:
        return 'A'
    elif 70 <= marks < 80:
        return 'B'
    elif 60 <= marks < 70:
        return 'C'
    elif 50 <= marks < 60:
        return 'D'
    else:
        return 'Fail'


def get_valid_marks():
    while True:
        try:
            marks = int(input("Enter the marks obtained by the student: "))
            if 0 <= marks <= 100:
                return marks
            else:
                print("Invalid input! Marks should be between 0 and 100.")
        except ValueError:
            print("Invalid input! Please enter a valid number.")


def main():
    while True:
        num_students = int(input("Enter the number of students: "))
        if num_students <= 0:
            print("Number of students must be greater than 0.")
            continue

        for student in range(1, num_students + 1):
            print(f"\nStudent {student}:")
            marks = get_valid_marks()
            grade = calculate_grade(marks)
            print(f"Grade: {grade}")

        choice = input("Do you want to calculate grades for another set of students? (yes/no): ").lower()
        if choice != 'yes':
            break

    print("Exiting the program. Thank you!")


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