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# Class and Object with Input, Grade Calculation, and List of Objects
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```
class Student:
    # Constructor
    def __init__(self, name, roll_no, marks):
        self.name = name
        self.roll_no = roll_no
        self.marks = marks

    # Method to calculate grade
    def calculate_grade(self):
        if self.marks >= 90:
            return "A"
        elif self.marks >= 75:
            return "B"
        elif self.marks >= 60:
            return "C"
        elif self.marks >= 40:
            return "D"
        else:
            return "F"

    # Method to display student details
    def display(self):
        print("\n--- Student Details ---")
        print("Name      :", self.name)
        print("Roll No.   :", self.roll_no)
        print("Marks      :", self.marks)
        print("Grade      :", self.calculate_grade())
```

```
# Main Program
```

```
students = []
```

```
n = int(input("Enter the number of students: "))
```

```
for i in range(n):
    print(f"\nEnter details for student {i + 1}:")
    name = input("Enter name: ")
    roll_no = int(input("Enter roll number: "))
    marks = float(input("Enter marks: "))
```

```
    # Create and store object
    student = Student(name, roll_no, marks)
    students.append(student)
```

```
# Display all student details
```

```
for stu in students:
    stu.display()
```

Enter the number of students: 2

Enter details for student 1:
Enter name: sahil

What can I help you build?



```
Enter roll number: 101
Enter marks: 45
```

```
Enter details for student 2:
Enter name: sam
Enter roll number: 102
Enter marks: 74
```

```
--- Student Details ---
```

```
Name      : sahil
Roll No.   : 101
Marks      : 45.0
Grade      : D
```

```
--- Student Details ---
```

```
Name      : sam
Roll No.   : 102
Marks      : 74.0
Grade      : C
```

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