```python
import math

# Prompt the user for basic salary
uin = input("Enter the Uin: ")
date = input("Enter the date (DD-MM-YYYY): ")
basic_salary = float(input("Enter the basic salary (BS): "))

# Calculate allowances
dearness_allowance = 0.70 * basic_salary
travel_allowance = 0.30 * basic_salary
house_rent_allowance = 0.10 * basic_salary

# Calculate gross salary
gross_salary = basic_salary + dearness_allowance + travel_allowance + house_rent_allowance

# Display the result
print(f"\nUin: {uin}")
print(f"Date: {date}")
print(f"Basic Salary (BS): {basic_salary:.2f}")
print(f"Dearness Allowance (DA) (70% of BS): {dearness_allowance:.2f}")
print(f"Travel Allowance (TA) (30% of BS): {travel_allowance:.2f}")
print(f"House Rent Allowance (HRA) (10% of BS): {house_rent_allowance:.2f}")
print(f"Gross Salary: {gross_salary:.2f}")
```

```python
print(f" 251A033 01/02/2026")
principal = float(input("Enter the principal amount: "))
rate = float(input("Enter the annual interest rate (in percentage): "))
time = float(input("Enter the time period (in years): "))

simple_interest = (principal * rate * time) / 100

print(f"\nPrincipal Amount: {principal:.2f}")
print(f"Annual Interest Rate: {rate:.2f}%")
print(f"Time Period: {time:.2f} years")
print(f"Simple Interest: {simple_interest:.2f}")
```

```
Enter the Uin: 251A033
Enter the date (DD-MM-YYYY): 01/02/2026
Enter the basic salary (BS): 20000

Uin: 251A033
Date: 01/02/2026
Basic Salary (BS): 20000.00
Dearness Allowance (DA) (70% of BS): 14000.00
Travel Allowance (TA) (30% of BS): 6000.00
House Rent Allowance (HRA) (10% of BS): 2000.00
Gross Salary: 42000.00
```

```
 251A033 01/02/2026
Enter the principal amount: 200
Enter the annual interest rate (in percentage): 3
Enter the time period (in years): 5

Principal Amount: 200.00
Annual Interest Rate: 3.00%
Time Period: 5.00 years
Simple Interest: 30.00
```

```python
#student enrollment manager
print ("251A033", "RIDDHI" ,"07/02/2026")
CET={"251A001", "251A002", "251A006"}
JEE={'251A001', '251A050', '251A049', '251A006'}
NEET={'251A022', '251A024', '251A002'}
# Total unique students appeared in at least one exam (Union of all sets)
print ("Total unique students across all exams:", CET | JEE | NEET)
# Total students appeared in all exams (Intersection of all sets)
print ("Total students appeared in all exams:", CET & JEE & NEET)
# Students who appeared in CET and JEE, but NOT NEET
print ("Total students appeared in CET and JEE, but not NEET:", (CET & JEE) - NEET)
# Students who appeared in CET and NEET, but NOT JEE
print ("Total students appeared in CET and NEET, but not JEE:", (CET & NEET) - JEE)
# Total students appeared in CET or JEE (Union of CET and JEE)
print ("Total students appeared in CET or JEE:", CET | JEE)
# Students appeared in both CET and JEE (Intersection of CET and JEE)
print ("Total students appeared in both CET and JEE:", CET & JEE)
# Students appeared in CET but not JEE (Difference of CET and JEE)
print ("Total students appeared in CET but not JEE:", CET - JEE)
# Students appeared in either CET or JEE but not both (Symmetric difference of CET and JEE)
print ("Total students appeared in either CET or JEE but not both:", (CET | JEE) - (CET & JEE))
```

```
251A033 RIDDHI 07/02/2026
Total unique students across all exams: {'251A049', '251A006', '251A022', '251A002', '251A024',
Total students appeared in all exams: set()
Total students appeared in CET and JEE, but not NEET: {'251A006', '251A001'}
Total students appeared in CET and NEET, but not JEE: {'251A002'}
Total students appeared in CET or JEE: {'251A049', '251A006', '251A002', '251A050', '251A001'}
Total students appeared in both CET and JEE: {'251A006', '251A001'}
Total students appeared in CET but not JEE: {'251A002'}
Total students appeared in either CET or JEE but not both: {'251A049', '251A002', '251A050'}
```