# Python Answers

## A1

```python  
marks = int(input("Enter your marks: "))  
if marks >= 90:  
 grade = 'A'  
elif marks >= 80:  
 grade = 'B'  
elif marks >= 70:  
 grade = 'C'  
elif marks >= 60:  
 grade = 'D'  
else:  
 grade = 'F'  
print(f"Your grade is {grade}.")  
```

## A2

```python  
year = int(input("Enter a year: "))  
if (year % 4 == 0 and year % 100 != 0) or (year % 400 == 0):  
 print(f"{year} is a leap year.")  
else:  
 print(f"{year} is not a leap year.")  
```

## A3

```python  
num1 = int(input("Enter first number: "))  
num2 = int(input("Enter second number: "))  
num3 = int(input("Enter third number: "))  
  
min\_num = num1  
if num2 < min\_num:  
 min\_num = num2  
if num3 < min\_num:  
 min\_num = num3  
  
print(f"The smallest number is {min\_num}.")  
```

## A4

```python  
a = int(input("Enter the first side: "))  
b = int(input("Enter the second side: "))  
c = int(input("Enter the third side: "))  
  
if a + b > c and a + c > b and b + c > a:  
 print("Yes, it can form a triangle.")  
else:  
 print("No, it cannot form a triangle.")  
```

# SQL Answers

## A5

```sql  
CREATE TRIGGER before\_employee\_insert  
BEFORE INSERT ON employees  
FOR EACH ROW  
SET NEW.created\_at = NOW();  
```

## A6

```sql  
CREATE TRIGGER verify\_salary  
BEFORE UPDATE ON salaries  
FOR EACH ROW  
BEGIN  
 IF NEW.salary\_amount < 10000 THEN  
 SIGNAL SQLSTATE '45000'  
 SET MESSAGE\_TEXT = 'The salary cannot be less than 10000.';  
 END IF;  
END;  
```

## A7

```sql  
CREATE TRIGGER after\_order\_update  
AFTER UPDATE ON orders  
FOR EACH ROW  
WHEN (OLD.amount <> NEW.amount)  
BEGIN  
 INSERT INTO order\_audit\_log(order\_id, changed\_on, note)  
 VALUES (NEW.order\_id, CURRENT\_TIMESTAMP, 'Order amount updated');  
END;  
```