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1

```
def calculate_discount(member_type, bill_value):  
    if member_type == "Premium":  
        discount = 0.20 * bill_value  
    elif member_type == "Gold":  
        discount = 0.15 * bill_value  
    elif member_type == "Silver":  
        discount = 0.10 * bill_value  
    else:  
        discount = 0.05 * bill_value if bill_value > 2000 else 0  
    return discount
```

```
print(calculate_discount("Gold", 3000)) #450
```

2

```
def mode_of_transport(priority, weight, distance):  
    if priority != "urgent" and weight <= 5:  
        return "Bike"  
    elif priority != "urgent" and weight > 5 and distance <= 250:  
        return "Lorry"  
    elif priority == "urgent" and distance < 50 and weight < 100:  
        return "Van"  
    else:  
        return "Train"
```

```
print(mode_of_transport("urgent", 30, 40)) # van
```

```
# _____
```

```
#3
```

```
def is_eligible_for_onsite(passport, communication, feedback, experience, age):  
    if passport and communication == "good" and feedback == "good" and experience >= 2  
and age >= 23:  
        return True  
    return False
```

```
print(is_eligible_for_onsite(True, "good", "good", 3, 25)) # True
```

```
# _____
```

```
# 4
```

```
def calculate_electricity_bill(units):  
    if units > 1000:  
        bill = units * 10  
    elif units > 500:  
        bill = units * 5  
    elif units > 200:  
        bill = units * 2  
    else:  
        bill = units * 1
```

```
return bill
```

```
print(calculate_electricity_bill(1200)) # 12000
```

```
# _____
```

```
# 5
```

```
def is_prime(n):
```

```
    if n <= 1:
```

```
        return False
```

```
    for i in range(2, int(n**0.5) + 1):
```

```
        if n % i == 0:
```

```
            return False
```

```
    return True
```

```
def display_primes(x, y):
```

```
    primes = [i for i in range(x, y+1) if is_prime(i)]
```

```
    return primes
```

```
print(display_primes(10, 50)) # [11, 13, 17, 19, 23, 29, 31, 37, 41, 43, 47]
```

```
# _____
```

```
#6
```

```
def reverse_number(number):  
    return int(str(number)[::-1])
```

```
print(reverse_number(12345)) # 54321
```

```
# _____
```