```python
import random

account_number = random.randint(1000, 9000)

while True:
    customer_code = ''
    while customer_code not in ['R', 'C', 'I']:
        customer_code = input("Enter customer code (R, C, or I): ").upper()
        if customer_code not in ['R', 'C', 'I']:
            print("Invalid input. Please enter R, C, or I")

    customer_name = input("Enter customer name: ")
    address = input("Enter customer address: ")
    phone_number = input("Enter customer phone number: ")

    beginning_reading = -1
    while(beginning_reading < 0 or beginning_reading > 999999999):
        beginning_reading = int(input("Enter beginning reading (between 0 and 999999999): "))
        if beginning_reading < 0 or beginning_reading > 999999999:
                print("Invalid input. Reading should be between 0 and 999999999.")

    ending_reading = -1
    while(ending_reading < 0 or ending_reading > 999999999):
        ending_reading = int(input("Enter ending reading (between 0 and 999999999): "))
        if ending_reading < 0 or ending_reading > 999999999:
                print("Invalid input. Reading should be between 0 and 999999999.")

    if ending_reading < beginning_reading:
           gallons = ((ending_reading + 1000000000) - beginning_reading)
    else:
           gallons = ending_reading - beginning_reading
    gallons_used = gallons / 10

    if customer_code == 'R':
        amount_billed = 5.00 + gallons_used * 0.0005
    elif customer_code == 'C':
        if gallons_used <= 4000000:
            amount_billed = 1000.00
        else:
            amount_billed = 1000.00 + (gallons_used - 4000000) * 0.00025
    else:
        if gallons_used <= 4000000:
            amount_billed = 1000.00
        elif gallons_used <= 10000000:
            amount_billed = 2000.00
        else:
            amount_billed = 2000.00 + (gallons_used - 10000000) * 0.00025

    print("--------------------Bill----------------------")
    print("Account Number:", account_number)
    print("Customer Name:", customer_name)
    print("Address:", address)
    print("Phone Number:", phone_number)
    print(f"Customer Code: {customer_code}")
    print(f"Beginning Reading: {beginning_reading:09}")
    print(f"Ending Reading: {ending_reading:09}")
    print(f"Gallons of Water Used: {gallons_used}")
    print(f"Amount Billed: ${amount_billed:.2f}")
```

```
    if customer_code not in ['R', 'C', 'I']:
        print("Invalid input. Please enter R, C, or I")

customer_name = input("Enter customer name: ")
address = input("Enter customer address: ")
phone_number = input("Enter customer phone number: ")

beginning_reading = -1
while(beginning_reading < 0 or beginning_reading > 999999999):
    beginning_reading = int(input("Enter beginning reading (between 0 and 999999999): "))
    if beginning_reading < 0 or beginning_reading > 999999999:
            print("Invalid input. Reading should be between 0 and 999999999.")

ending_reading = -1
while(ending_reading < 0 or ending_reading > 999999999):
    ending_reading = int(input("Enter ending reading (between 0 and 999999999): "))
    if ending_reading < 0 or ending_reading > 999999999:
            print("Invalid input. Reading should be between 0 and 999999999.")

if ending_reading < beginning_reading:
       gallons = ((ending_reading + 1000000000) - beginning_reading)
else:
       gallons = ending_reading - beginning_reading
gallons_used = gallons / 10

if customer_code == 'R':
    amount_billed = 5.00 + gallons_used * 0.0005
elif customer_code == 'C':
    if gallons_used <= 4000000:
        amount_billed = 1000.00
    else:
        amount_billed = 1000.00 + (gallons_used - 4000000) * 0.00025
else:
    if gallons_used <= 4000000:
        amount_billed = 1000.00
    elif gallons_used <= 10000000:
        amount_billed = 2000.00
    else:
        amount_billed = 2000.00 + (gallons_used - 10000000) * 0.00025

print("--------------------Bill----------------------")
print("Account Number:", account_number)
print("Customer Name:", customer_name)
print("Address:", address)
print("Phone Number:", phone_number)
print(f"Customer Code: {customer_code}")
print(f"Beginning Reading: {beginning_reading:09}")
print(f"Ending Reading: {ending_reading:09}")
print(f"Gallons of Water Used: {gallons_used}")
print(f"Amount Billed: ${amount_billed:.2f}")
print("----------------------------------------------")

choice = input("\nDo you want to perform new calculation? (Y/N): ").upper()
if choice != 'Y':
    break
else:
    account_number += 1
```

```
= RESTART: /Users/krishahemani/Downloads/CSULB/Spring2024/174/week6/Project2b.py
Enter customer code (R, C, or I): I
Enter customer name: j
Enter customer address: jhde
Enter customer phone number: 57942834905
Enter beginning reading (between 0 and 999999999): 345
Enter ending reading (between 0 and 999999999): 654
--------------------Bill----------------------
Account Number: 6447
Customer Name: j
Address: jhde
Phone Number: 57942834905
Customer Code: I
Beginning Reading: 000000345
Ending Reading: 000000654
Gallons of Water Used: 30.9
Amount Billed: $1000.00
----------------------------------------------

Do you want to perform new calculation? (Y/N): y
Enter customer code (R, C, or I): i
Enter customer name: hbfade
Enter customer address: 830 sbfjwe 83i45
Enter customer phone number: 7690210450
Enter beginning reading (between 0 and 999999999): 999999999
Enter ending reading (between 0 and 999999999): 999999999
--------------------Bill----------------------
Account Number: 6448
Customer Name: hbfade
Address: 830 sbfjwe 83i45
Phone Number: 7690210450
Customer Code: I
Beginning Reading: 999999999
Ending Reading: 999999999
Gallons of Water Used: 0.0
Amount Billed: $1000.00
----------------------------------------------

Do you want to perform new calculation? (Y/N): n
>>>
```

```
import random

account_number = random.randint(1000, 9000)

while True:
  customer_code = ''
  while customer_code not in ['R', 'C', 'I']:
    customer_code = input("Enter customer code (R, C, or I): ").upper()
    if customer_code not in ['R', 'C', 'I']:
      print("Invalid input. Please enter R, C, or I")

  customer_name = input("Enter customer name: ")
  address = input("Enter customer address: ")
  phone_number = input("Enter customer phone number: ")
```

```
beginning_reading = -1
while(beginning_reading < 0 or beginning_reading > 999999999):
   beginning_reading = int(input("Enter beginning reading (between 0 and 999999999): "))
   if beginning_reading < 0 or beginning_reading > 999999999:
         print("Invalid input. Reading should be between 0 and 999999999.")

ending_reading = -1
while(ending_reading < 0 or ending_reading > 999999999):
   ending_reading = int(input("Enter ending reading (between 0 and 999999999): "))
   if ending_reading < 0 or ending_reading > 999999999:
         print("Invalid input. Reading should be between 0 and 999999999.")

if ending_reading < beginning_reading:
     gallons = ((ending_reading + 1000000000) - beginning_reading)
else:
     gallons = ending_reading - beginning_reading
gallons_used = gallons / 10

if customer_code == 'R':
   amount_billed = 5.00 + gallons_used * 0.0005
elif customer_code == 'C':
   if gallons_used <= 4000000:
      amount_billed = 1000.00
   else:
      amount_billed = 1000.00 + (gallons_used - 4000000) * 0.00025
else:
   if gallons_used <= 4000000:
      amount_billed = 1000.00
   elif gallons_used <= 10000000:
      amount_billed = 2000.00
   else:
      amount_billed = 2000.00 + (gallons_used - 10000000) * 0.00025

print("--------------------Bill----------------------")
print("Account Number:", account_number)
print("Customer Name:", customer_name)
print("Address:", address)
print("Phone Number:", phone_number)
print(f"Customer Code: {customer_code}")
print(f"Beginning Reading: {beginning_reading:09}")
print(f"Ending Reading: {ending_reading:09}")
print(f"Gallons of Water Used: {gallons_used}")
print(f"Amount Billed: ${amount_billed:.2f}")
print("----------------------------------------")
```

```
choice = input("\nDo you want to perform new calculation? (Y/N): ").upper()
if choice != 'Y':
   break
else:
   account_number += 1
```