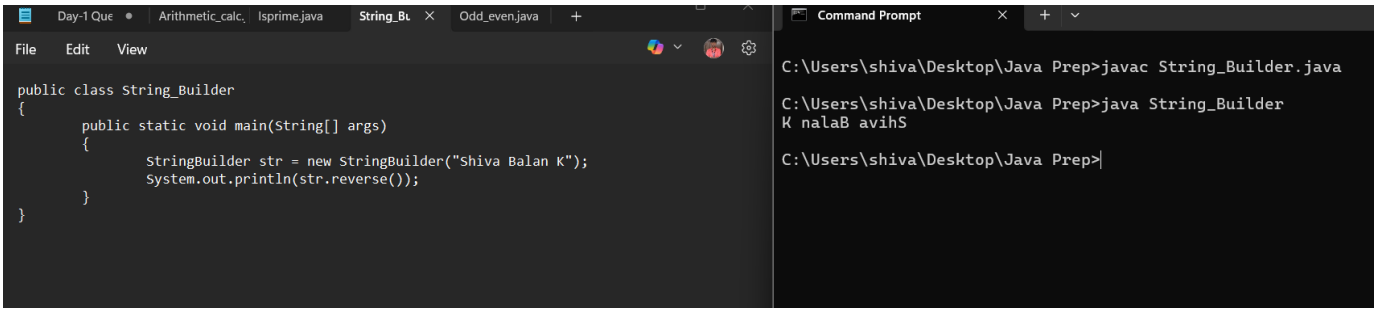
1. write a java program to reverse a string using string builder

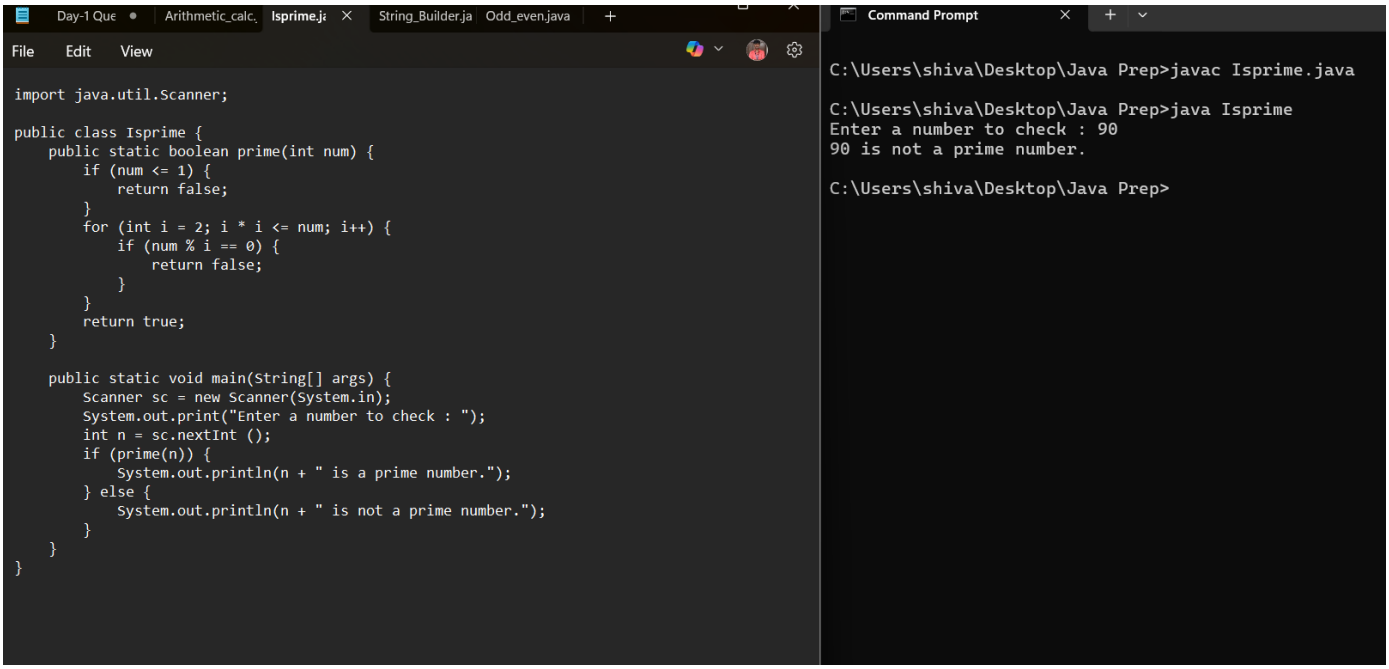
```
public class String_Builder
{
      public static void main(String[] args)
      {
            StringBuilder str = new StringBuilder("Shiva Balan K");
            System.out.println(str.reverse());
      }
}
```



2. write a java program to find whether given number is prime or not

```
import java.util.Scanner;
public class Isprime {
    public static boolean prime(int num) {
        if (num <= 1) {
            return false;
        }
        for (int i = 2; i * i <= num; i++) {
            if (num % i == 0) {
                return false;
            }
        }
        return true;
    }

    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
```

```
      System.out.print("Enter a number to check : ");
      int n = sc.nextInt ();
         if (prime(n)) {
             System.out.println(n + " is a prime number.");
         } else {
             System.out.println(n + " is not a prime number.");
         }
     }
}
```

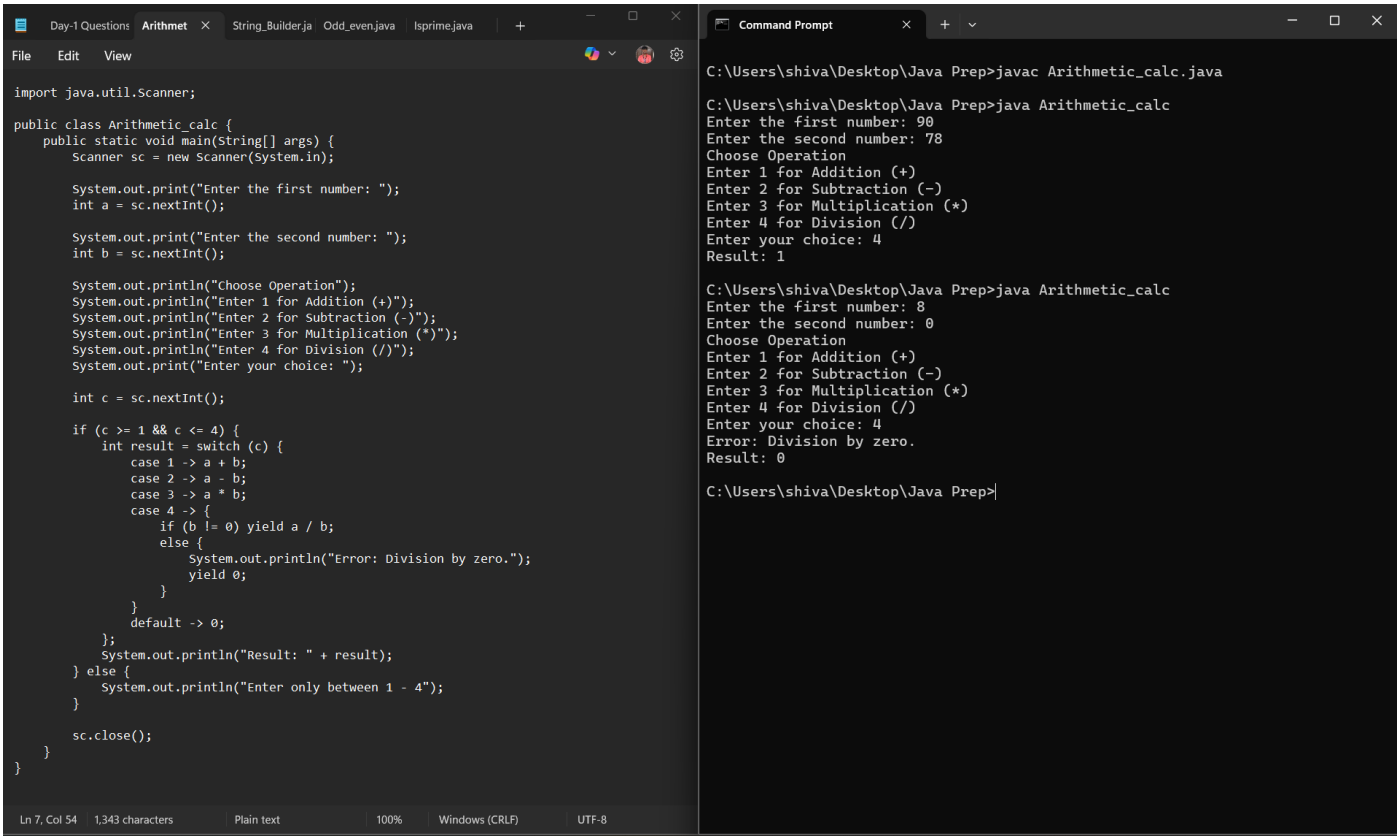


3. write a java program to perform arithmetic calculator,

```
import java.util.Scanner;

public class Arithmetic_calc {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);

        System.out.print("Enter the first number: ");
        int a = sc.nextInt();

        System.out.print("Enter the second number: ");
```

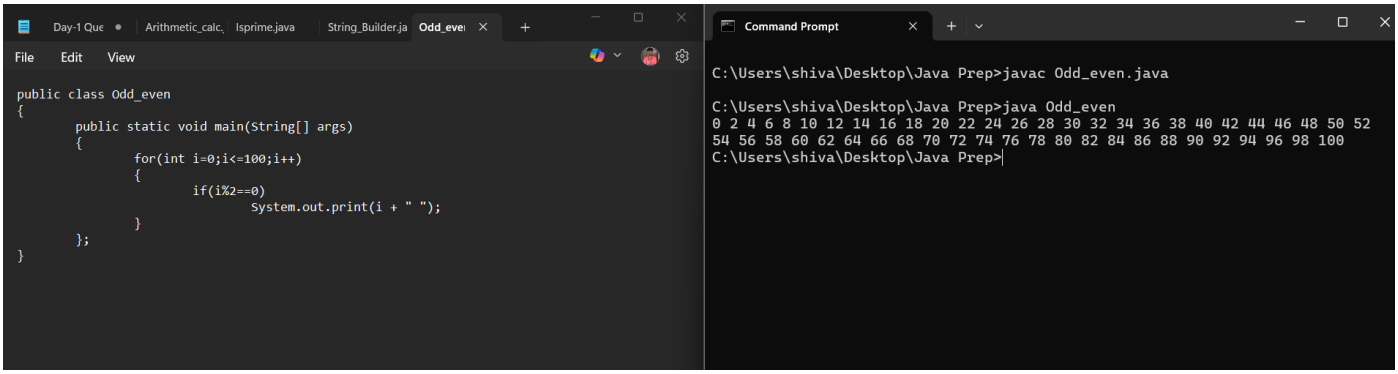
```
        int b = sc.nextInt();

        System.out.println("Choose Operation");
        System.out.println("Enter 1 for Addition (+)");
        System.out.println("Enter 2 for Subtraction (-)");
        System.out.println("Enter 3 for Multiplication (*)");
        System.out.println("Enter 4 for Division (/)");
        System.out.print("Enter your choice: ");

        int c = sc.nextInt();

        if (c >= 1 && c <= 4) {
            int result = switch (c) {
                case 1 -> a + b;
                case 2 -> a - b;
                case 3 -> a * b;
                case 4 -> {
                    if (b != 0) yield a / b;
                    else {
                        System.out.println("Error: Division by zero.");
                        yield 0;
                    }
                }
                default -> 0;
            };
            System.out.println("Result: " + result);
        } else {
            System.out.println("Enter only between 1 - 4");
        }

        sc.close();
    }
```

}



4. write a java program to print even numbers 1-100,

```
public class Odd_even
{
	public static void main(String[] args)
	{
		for(int i=0;i<=100;i++)
		{
			if(i%2==0)
				System.out.print(i + " ");
		}
	};
}
```



5. write a java program to perform bank transaction - creation of account, transaction.

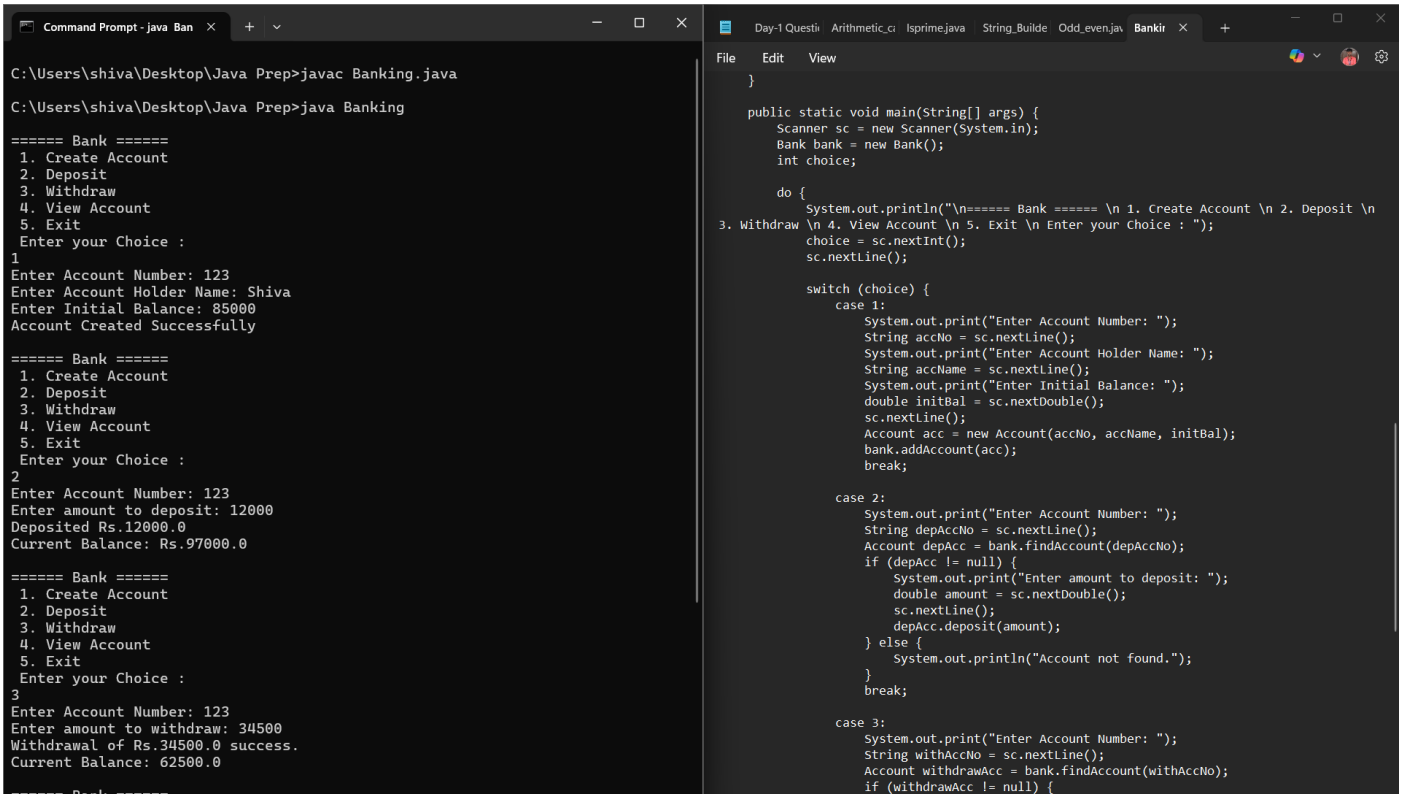
```
import java.util.*;


public class Banking {


    static class Account {
        String accno;
        String accname;
        double balance;

        public Account(String accno, String accname, double balance) {
            this.accno = accno;
            this.accname = accname;
            this.balance = balance;
        }

        public void deposit(double amount) {
            if (amount > 0) {
                balance += amount;
                System.out.println("Deposited Rs." + amount);
                System.out.println("Current Balance: Rs." + balance);
            } else {
                System.out.println("Deposit Failed. Amount must be positive.");
            }
        }
```

```
        public void withdraw(double amt) {
            if (amt > 0 && balance >= amt) {
                balance -= amt;
                System.out.println("Withdrawal of Rs." + amt + " success.");
                System.out.println("Current Balance: " + balance);
            } else if (amt <= 0) {
                System.out.println("Enter only positive values.");
            } else {
                System.out.println("Insufficient Balance.");
            }
        }

        public double getBal() {
            return balance;
        }

        public String getAccinfo() {
            return "Account Number: " + accno + ", Account Holder Name: " +
accname + ", Balance: " + balance;
        }

        public String getAccno() {
            return accno;
        }
    }

    static class Bank {
        public List<Account> accounts;

        public Bank() {
            this.accounts = new ArrayList<>();
```

```
        }

        public void addAccount(Account account) {
            accounts.add(account);
            System.out.println("Account Created Successfully");
        }

        public Account findAccount(String accno) {
            for (Account account : accounts) {
                if (account.getAccno().equals(accno)) {
                    return account;
                }
            }
            return null;
        }
    }

    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        Bank bank = new Bank();
        int choice;

        do {
            System.out.println("\n====== Bank ====== \n 1. Create Account \n 2.
Deposit \n 3. Withdraw \n 4. View Account \n 5. Exit \n Enter your Choice : ");
            choice = sc.nextInt();
            sc.nextLine();

            switch (choice) {
                case 1:
                    System.out.print("Enter Account Number: ");
                    String accNo = sc.nextLine();
```

```
            System.out.print("Enter Account Holder Name: ");
            String accName = sc.nextLine();
            System.out.print("Enter Initial Balance: ");
            double initBal = sc.nextDouble();
            sc.nextLine();
            Account acc = new Account(accNo, accName, initBal);
            bank.addAccount(acc);
            break;

        case 2:
            System.out.print("Enter Account Number: ");
            String depAccNo = sc.nextLine();
            Account depAcc = bank.findAccount(depAccNo);
            if (depAcc != null) {
                System.out.print("Enter amount to deposit: ");
                double amount = sc.nextDouble();
                sc.nextLine();
                depAcc.deposit(amount);
            } else {
                System.out.println("Account not found.");
            }
            break;

        case 3:
            System.out.print("Enter Account Number: ");
            String withAccNo = sc.nextLine();
            Account withdrawAcc = bank.findAccount(withAccNo);
            if (withdrawAcc != null) {
                System.out.print("Enter amount to withdraw: ");
                double amt = sc.nextDouble();
                sc.nextLine();
                withdrawAcc.withdraw(amt);
```

```
                    } else {
                        System.out.println("Account not found.");
                    }
                    break;

                case 4:
                    System.out.print("Enter Account Number: ");
                    String infoAccNo = sc.nextLine();
                    Account infoAcc = bank.findAccount(infoAccNo);
                    if (infoAcc != null) {
                        System.out.println("Account Found!");
                        System.out.println(infoAcc.getAccinfo());
                    } else {
                        System.out.println("Account not found.");
                    }
                    break;

                case 5:
                    System.out.println("*** Thanking you! ***");
                    break;

                default:
                    System.out.println("Enter a valid option only ...");
            }

        } while (choice != 5);

        sc.close();
    }
}
```



Output

```
====== Bank ======
 1. Create Account
 2. Deposit
 3. Withdraw
 4. View Account
 5. Exit
 Enter your Choice :
1
Enter Account Number: 123
Enter Account Holder Name: Shiva
Enter Initial Balance: 85000
Account Created Successfully

====== Bank ======
 1. Create Account
 2. Deposit
 3. Withdraw
 4. View Account
```

```
 5. Exit
 Enter your Choice :
2
Enter Account Number: 123
Enter amount to deposit: 12000
Deposited Rs.12000.0
Current Balance: Rs.97000.0

====== Bank ======
 1. Create Account
 2. Deposit
 3. Withdraw
 4. View Account
 5. Exit
 Enter your Choice :
3
Enter Account Number: 123
Enter amount to withdraw: 34500
Withdrawal of Rs.34500.0 success.
Current Balance: 62500.0

====== Bank ======
 1. Create Account
 2. Deposit
 3. Withdraw
 4. View Account
 5. Exit
 Enter your Choice :
4
Enter Account Number: 123
Account Found!
Account Number: 123, Account Holder Name: Shiva, Balance: 62500.0
```

```
====== Bank ======
 1. Create Account
 2. Deposit
 3. Withdraw
 4. View Account
 5. Exit
 Enter your Choice :
1
Enter Account Number: 345
Enter Account Holder Name: balan
Enter Initial Balance: 30908
Account Created Successfully
====== Bank ======
 1. Create Account
 2. Deposit
 3. Withdraw
 4. View Account
 5. Exit
 Enter your Choice :
2
Enter Account Number: 809
Account not found.
====== Bank ======
 1. Create Account
 2. Deposit
 3. Withdraw
 4. View Account
 5. Exit
 Enter your Choice :
5
*** Thanking you! ***
```