

Slip 22

10 Marks:

```
java
Copy code
import java.util.function.Function;

public class Cube {
    public static void main(String args[]) {
        Function<Integer, Integer> cubFunction = (n) -> n * n * n;
        int n = 5;
        int cube = cubFunction.apply(n);
        System.out.println("The cube of " + n + " is: " + cube);
    }
}
```

20 Marks:

```
java
Copy code
import java.util.Scanner;

abstract class Order {
    String id;
    String description;

    public Order(String id, String description) {
        this.id = id;
        this.description = description;
    }

    public abstract void accept();

    public void display() {
        System.out.println("Order ID: " + id);
        System.out.println("Description: " + description);
    }
}

class PurchaseOrder extends Order {
    String customerName;

    public PurchaseOrder(String id, String description, String customerName)
    {
        super(id, description);
        this.customerName = customerName;
    }

    @Override
    public void accept() {
        System.out.println("Accepting Purchase Order for customer: " +
customerName);
    }
}
```

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        @Override
        public void display() {
            super.display();
            System.out.println("Customer Name: " + customerName);
        }
    }

    class SalesOrder extends Order {
        String vendorName;

        public SalesOrder(String id, String description, String vendorName) {
            super(id, description);
            this.vendorName = vendorName;
        }

        @Override
        public void accept() {
            System.out.println("Accepting Sales Order for vendor: " +
vendorName);
        }

        @Override
        public void display() {
            super.display();
            System.out.println("Vendor Name: " + vendorName);
        }
    }

    public class Main {
        public static void main(String[] args) throws IOException {
            BufferedReader br = new BufferedReader(new
InputStreamReader(System.in));
            System.out.println("Select 1 for Purchase Order or 2 for Sales Order:
");
            int choice = Integer.parseInt(br.readLine());

            System.out.println("Enter ID and Description for the order: ");
            String id = br.readLine();
            String description = br.readLine();

            Order order;
            if (choice == 1) {
                System.out.println("Enter Customer Name: ");
                String customerName = br.readLine();
                order = new PurchaseOrder(id, description, customerName);
            } else {
                System.out.println("Enter Vendor Name: ");
                String vendorName = br.readLine();
                order = new SalesOrder(id, description, vendorName);
            }

            order.accept();
            order.display();
        }
    }

```