I.T.a

Encapsulation Example

- Demonstrate one example of encapsulation that you have written in a program.

Encapsulation means that the internal representation of an object is hidden from the outside.

Only the object can interact with its internal data. Public methods can be created to open a defined way to access the logic inside an object.

```java
// Deck constructor -----------------------
public Deck()
{
    this.deck = new ArrayList<Card>();
}


// Return the Deck -----------------
public ArrayList<Card> getDeck()
{
    return this.deck;
}

// make the deck from the Suit and Rank ------
public void makeDeck()
{
    for( SuitType suit : SuitType.values())
    {
        for ( RankType rank : RankType.values())
        {
            deck.add(new Card(rank, suit));
        }
    }
}
```

```java
package cards;

public class Card
{

    private RankType rank;
    private SuitType suit;

    public Card(RankType rank, SuitType suit) {
        this.rank = rank;
        this.suit = suit;
    }

    public RankType getRank(){
        return this.rank;
    }

    public SuitType getSuit(){
        return this.suit;
    }

    public int getValue()
    {
        int value;
        switch (rank){
            case ACE:    value = 1;
                break;
            case TWO:    value = 2;
                break;
            case THREE: value = 3;
                break;
            case FOUR:   value = 4;
                break;
```