LAB 4 Answers

1. Describe the code that is executed. Be specific! Graphically describe what the object referenced by discardPile looks like. (Note: you should leave enough room to draw the DiscardPile object after printing the document.)

**The code that is executed is the default constructor for the DiscardPile object called discardPile. The DiscardPile class is using super() to inherit the constructors and methods from the Stack class therefore the default constructor is coming from the Stack classes default constructor.**

|  |  |
| --- | --- |
| TOP=BOTTOM | 0 |

1. Which card is on the top of the discard pile? What card is associated with the integer 2? What card is associated with the integer 19?

**The card that is on top of the discardPile is the 4 of Spades. The card that is associated with the integer 2 is the 4 of Clubs. The card that is associated with the integer 19 is the 8 of Diamonds.**

1. Why is it necessary to make the discard pile empty and repopulate it before attempting another call to removeTopCards?

**It is necessary to make the discard pile empty and repopulate. The reason for this is because when you attempt to do it without making it empty is that the method attempts to run on an empty stack.**