**package** com.example.android.funexercises;  
  
**import** android.support.v7.app.AppCompatActivity;  
**import** android.os.Bundle;  
**import** android.view.View;  
**import** android.widget.EditText;  
  
**import** java.util.ArrayList;  
  
**public class** ExerciseThreeActivity **extends** AppCompatActivity {  
  
 @Override  
 **protected void** onCreate(Bundle savedInstanceState) {  
 **super**.onCreate(savedInstanceState);  
 setContentView(R.layout.***activity\_exercise\_three***);  
 }  
  
  
  
  
 **public void** createDeck (View v, **int** cardNumber){  
  
 EditText numberOfCardsView = findViewById(R.id.***number\_of\_cards***);  
 String numberOfCardsString = numberOfCardsView.getText().toString();  
 **int** numberOfCards = Integer.*parseInt*(numberOfCardsString);  
 ArrayList<String> mydeck = **new** ArrayList<String>();  
 ArrayList<String> mydeckColours = **new** ArrayList<String>();  
 ArrayList<String> mydeckValues = **new** ArrayList<String>();  
  
 *// placing elements into the mydeckValue arraylist (defining the values/numbers of the cards)* mydeckValues.add(**"Ace of"**); mydeckValues.add(**"2"**);  
 mydeckValues.add(**"3"**); mydeckValues.add(**"4"**);  
 mydeckValues.add(**"5"**); mydeckValues.add(**"6"**);  
 mydeckValues.add(**"7"**); mydeckValues.add(**"8"**);  
 mydeckValues.add(**"9"**); mydeckValues.add(**"10"**);  
 mydeckValues.add(**"Jack of"**); mydeckValues.add(**"Queen of"**);  
 mydeckValues.add(**"King of"**);  
  
 *// placing elements into the mydeckColours arraylist (defining the colours of the cards)* mydeckColours.add(**"Clubs"**); mydeckColours.add(**"Diamonds"**);  
 mydeckColours.add(**"Hearts"**); mydeckColours.add(**"Spades"**);  
  
 **int** itemNumber = 0;  
  
 */\*\*  
 \* if the generated deck was chosen to contain 4 or less cards, they all should be of different colours,  
 \* therefore there is no need to randomly generate the cards' colours.  
 \* But the values (numbers) of the cards will be randomly generated.  
 \*/* **if** (numberOfCards < 5) {  
 **while** (itemNumber < numberOfCards) {  
 *// creating a random number between 1 and 13 for value* **int** randomNumber = (**int**) (Math.*random*() \* 13 + 1);  
 mydeck.add(itemNumber, mydeckValues.get(randomNumber) + **" "** + mydeckColours.get(itemNumber));  
 }  
 }  
 **if** (numberOfCards > 4) {  
 *// creating a random number between 1 and 13 for value* **int** randomNumber = (**int**) (Math.*random*() \* 13 + 1);  
 *// creating a random number between 1 and 4 for colour* **int** randomNumber2 = (**int**) (Math.*random*() \* 4 + 1);  
 **while** (itemNumber < numberOfCards) {  
 mydeck.add(itemNumber, mydeckValues.get(randomNumber) + **" "** + mydeckColours.get(randomNumber2));  
 }  
 }  
 }  
  
   
  
  
  
}