Jordan's Test Plan

numberOfPeople Test

| Initial Conditions | A peopleList array has been created using a ParseFile object which contains a list of imported People and their biographical information |
|--------------------|--|
| Input Test Data | A peopleList and empty Graph object is sent to the createPerson function |
| Expected Results | A graph is returned which is expected to contain an equal number of nodes as there are entries in peopleList |
| Test Log Status | Expected length: 22, real length: 22. Test successful |

checkPersonData Test

| Initial Conditions | A peopleList array has been created using a ParseFile object which contains a list of imported People and their biographical information |
|--------------------|--|
| Input Test Data | A peopleList and empty Graph object is sent to the createPerson function |
| Expected Results | A Person node with ID P1 exists within the returned graph with first name Dick, last name Johnson, and suffix Jr. |
| Test Log Status | P1 person node contained the expected values. Test successful |

numberOfRelationships Test

| Initial Conditions | A relationshipList array has been created using a ParseFile object which contains the imported relationship biographical data. The graph already contains People nodes. |
|--------------------|---|
| Input Test Data | A relationshipList and the graph object is sent to the createRelationships function |
| Expected Results | The returned graph contains an equal number of relationships as there are entries in the relationshipList array |
| Test Log Status | Expected length: 9, real length: 9. Test successful |

checkRelationshipInfo Test

| Initial Conditions | A relationshipList array has been created using a ParseFile object which contains the imported relationship biographical data. The graph already contains People nodes. |
|--------------------|---|
| Input Test Data | A relationshipList and the graph object is sent to the |

| | createRelationships function |
|------------------|--|
| Expected Results | A RelationshipEdge object with its associated Relationship object ID R1 contains a start date of 6/7/1938 and no end date is contained within the return graph |
| Test Log Status | R1 relationship found and contained the expected values. Test successful |

${\it checkRelationshipEdges\ Test}$

| Initial Conditions | A relationshipList array has been created using a ParseFile object which contains the imported relationship biographical data. The graph already contains People nodes. |
|--------------------|---|
| Input Test Data | A relationshipList and the graph object is sent to the createRelationships function |
| Expected Results | Person node with ID P1 is successfully connected via Relationship R6 to the Unknown Person node |
| Test Log Status | Node with P1 contains R1 in its EdgeSet which is successfully connected to Unknown Person node. Test successful |

numberOfParents Test

| Initial Conditions | A parentList array has been created using a ParseFile object which contains all children and their parental relationship ID. The graph already contains both Person and Relationship data. |
|--------------------|--|
| Input Test Data | A parentList and the graph object is sent to the createParents function |
| Expected Results | A graph is returned with a number of parent relationships equal to 2 * length of parentList (there's one parent relationship for each parent) |
| Test Log Status | Number of parent relationships: 38, number expected: 38. Test successful |

checkParentEdge Test

| Initial Conditions | A parentList array has been created using a ParseFile object which contains all the parent-child relationships. The graph already contains both Person and Relationship data. |
|--------------------|---|
| Input Test Data | A parentList and the graph object is sent to the createParents function |

| Expected Results | A graph is returned with Person node P19 containing the relationship Child-P6 which connects to the P6 Person node. |
|------------------|---|
| Test Log Status | P19 contains Child-P6 in its edgesSet which is connected to P6. Test successful |

Robert's Test Plan

onlyAddID()

| Initial Conditions | A new FamilyGraph object and new graph object are instantiated and utilize a helper method called <i>addPerson</i> that adds a new person object to the graph. |
|--------------------|--|
| Input Test Data | An ID of "P45" is entered as an input, with all other input fields left blank. |
| Expected Results | The iterator will stop when it finds "P45" in the graph and return true. |
| Test Log Status | Expected: P45 Actual: P45 Test passed successfully |

onlyAddFullName()

| Initial Conditions | A new FamilyGraph object and new graph object are instantiated and utilize a helper method called <i>addPerson</i> that adds a new person object to the graph. |
|--------------------|--|
| Input Test Data | An ID of "P46", a first name of "Maximus", and a last name of "Decimus Meridius" are entered as inputs, with all other input fields left blank. |
| Expected Results | The iterator will stop when it finds "P46" and check to see if both the first name and last name match (they should). |
| Test Log Status | Expected: Maximus Actual: Maximus Expected: Decimus Meridius Actual: Decimus Meridius Test passed successfully |

onlyAddFirstName()

| Initial Conditions | A new FamilyGraph object and new graph object are instantiated and utilize a helper method called <i>addPerson</i> that adds a new person object to the graph. |
|--------------------|--|
| Input Test Data | An ID of "P47" and a first name of "Commodus" are entered as inputs, with all other input fields left blank. |
| Expected Results | The iterator will stop when it finds "P47" in the graph and check to see if the first name matches (it should). |
| Test Log Status | Expected: Commodus Actual: Commodus |
| | Test passed successfully |

onlyAddLastName()

| Initial Conditions | A new FamilyGraph object and new graph object are instantiated and utilize a helper method called <i>addPerson</i> that adds a new person object to the graph. |
|--------------------|--|
| Input Test Data | An ID of "P48" and a last name of "Caesar" are entered as inputs, with all other input fields left blank. |
| Expected Results | The iterator will stop when it finds "P48" in the graph and check to see if the last name matches (it should). |
| Test Log Status | Expected: Caesar Actual: Caesar Test passed successfully |

onlyAddSuffix()

| Initial Conditions | A new FamilyGraph object and new graph object are instantiated and utilize a helper method called <i>addPerson</i> that adds a new person object to the graph.Blah blah blah |
|--------------------|--|
| Input Test Data | An ID of "P49" and a suffix of "Mrs." are entered as inputs, with all other input fields left blank. |
| Expected Results | The iterator will stop when it finds "P49" in the graph and check to see if the suffix matches (it should). |
| Test Log Status | Expected: Mrs. Actual: Mrs. |
| | Test passed successfully |

onlyAddDOB()

| Initial Conditions | A new FamilyGraph object and new graph object are instantiated and utilize a helper method called <i>addPerson</i> that adds a new person object to the graph. |
|--------------------|--|
| Input Test Data | An ID of "P50" and a date of birth of "07/12/100" are entered as inputs, with all other input fields left blank. |
| Expected Results | The iterator will stop when it finds "P50" in the graph and check to see if the birthdate matches (it should). |
| Test Log Status | Expected: 07/12/100 Actual: 07/12/100 Test passed successfully |

onlyAddDOD()

| Initial Conditions | A new FamilyGraph object and new graph object are instantiated and utilize a helper method called <i>addPerson</i> that adds a new person object to the graph. |
|--------------------|--|
| Input Test Data | An ID of "P50" and a date of death of "03/15/44" are entered as inputs, with all other input fields left blank. |
| Expected Results | The iterator will stop when it finds "P50" in the graph and check to see if the date of death matches (it should). |
| Test Log Status | Expected: 03/15/44 Actual: 03/15/44 Test passed successfully |

onlyAddBirthPlace()

| Initial Conditions | A new FamilyGraph object and new graph object are instantiated and utilize a helper method called <i>addPerson</i> that adds a new person object to the graph. |
|--------------------|--|
| Input Test Data | An ID of "P51" and a birthplace of "Rome" are entered as inputs, with all other input fields left blank. |
| Expected Results | The iterator will stop when it finds "P51" in the graph and check to see if the birthplace matches (it should). |
| Test Log Status | Expected: Rome Actual: Rome |
| | Test passed successfully |

onlyAddDeathPlace()

| Initial Conditions | A new FamilyGraph object and new graph object are instantiated and utilize a helper method called <i>addPerson</i> that adds a new person object to the graph. |
|--------------------|--|
| Input Test Data | An ID of "P52" and a death place of "Gaul" are entered as inputs, with all other input fields left blank. |
| Expected Results | The iterator will stop when it finds "P52" in the graph and check to see if the death place matches (it should). |
| Test Log Status | Expected: Gaul Actual: Gaul |
| | Test passed successfully |

Collin's Test Plan

readFileLines()

| Initial Conditions | A ParseFile object and list type strings is created in order to run getdata on the on the parsefile |
|--------------------|---|
| Input Test Data | Input of "test" which is a file holding test data that would normally be parsed and turned into a family graph. It is parsed with ParseFile |
| Expected Results | Expected an int of 58 as this should be the size of the parsed data when put into the list |
| Test Log Status | Expected: 58 Actual: 58 |
| | Test Passed Successfully |

readFile()

| Initial Conditions | Tests to see if ParseFile can correctly read in the lines of a file. One file named test is used. First, a ParseFile object and string list are created which is filled by the object.getData(). Another list is created but is populated with files.readAlllines of the test file. |
|--------------------|---|
| Input Test Data | Input of "test" which is a file holding test data that would normally be parsed and turned into a family graph. It is parsed with ParseFile |
| Expected Results | Two lists that are equal in everyway |
| Test Log Status | Expected: List |

| Actual: List (These are equal, I just don't have the room here to print what the contain) Test Passed Successfully |
|--|
|--|

parseFullPerson()

| Initial Conditions | Arraylist holding a hashtable of a person with every field filled out. This will be compared with the first person in the data to be parsed and placed in the graph |
|--------------------|---|
| Input Test Data | A person with these fields (P1,Johnson,Dick,Jr,9/1/1940,Flint,12/30/2020,Lansing,R1) and test file (same as the 2 tests above) |
| Expected Results | A person at peopleList(0) with the data P1,Johnson,Dick,Jr,9/1/1940,Flint,12/30/2020,Lansing,R1 |
| Test Log Status | Expected: P1,Johnson,Dick,Jr,9/1/1940,Flint,12/30/2020,Lansing,R1 Actual: P1,Johnson,Dick,Jr,9/1/1940,Flint,12/30/2020,Lansing,R1 Test Passed Successfully |

parsePartialPerson()

| Initial Conditions | Same as test "parseFullPerson" but some of the fields of the person are missing |
|--------------------|--|
| Input Test Data | Same as test "parseFullPerson" but some of the fields of the person are missing P2,Johnson,Jane Sarah,,6/15/1942,Saginaw,,,R1 |
| Expected Results | A person at peopleList(1) with the data P2,Johnson,Jane Sarah,,6/15/1942,Saginaw,,,R1 |
| Test Log Status | Expected: P2,Johnson,Jane Sarah,,6/15/1942,Saginaw,,,R1 Actual: P2,Johnson,Jane Sarah,,6/15/1942,Saginaw,,,R1 Test Passed Successfully |

parseMoreEmptyPerson()

| Initial Conditions | Same as test "parsePartialPerson" but more of the fields of the |
|--------------------|---|
| | person are missing |

| Input Test Data | Same as test "parsePartialPerson" but more of the fields of the person are missing P16,Smith,John J,,,,,R7 |
|------------------|--|
| Expected Results | A person at peopleList(10) with the data P16,Smith,John J,,,,,R7 |
| Test Log Status | Expected: P16,Smith,John J,,,,,R7 Actual: P16,Smith,John J,,,,,R7 Test Passed Successfully |

parseRelationship()

| Initial Conditions | An arraylist that holds a hashtable of a full relationship, Another arraylist that holds hashtables populated by a parser object .getrelationship method. Parser was made with the test file used in previous tests |
|--------------------|---|
| Input Test Data | Test file called "test.txt" that has relationships in it |
| Expected Results | A relationship at relationshiplist(0) with data R1,P7,P6,6/7/1938,,St Matthew's Flint Michigan,,, |
| Test Log Status | Expected: R1,P7,P6,6/7/1938,,St Matthew's Flint Michigan,,, Actual: R1,P7,P6,6/7/1938,,St Matthew's Flint Michigan,,, Test Passed Successfully |

parsePartialRelationship()

| Initial Conditions | Same as test "parseRelationship" but more of the fields of the relationship are missing |
|--------------------|---|
| Input Test Data | Test file called "test.txt" that has relationships in it |
| Expected Results | A relationship at relationshiplist(3) with data R6,,P1,,,,, |
| Test Log Status | Expected: R6,,P1,,,,, Actual: R6,,P1,,,,, |

| Test F | Passed Successfully |
|--------|---------------------|
|--------|---------------------|

parseChild()

| Initial Conditions | An arraylist that holds a hashtable of a full child, Another arraylist that holds hashtables populated by a parser object .getParsedChild method. Parser was made with the test file used in previous tests |
|--------------------|---|
| Input Test Data | Test file called "test.txt" that has children in it |
| Expected Results | A child at childList(0) with data R1,P1,,,,,, |
| Test Log Status | Expected: R1,P1,,,,,, Actual: R1,P1,,,,,, Test Passed Successfully |

Michael's Test Plan

TestGrandparents Test

| Initial Conditions | Person,Relationship, Parent arrays are created using the parsefile which has 3 list of data to imported from. |
|--------------------|---|
| Input Test Data | The Relationship array is searched through to find any grandparents and counted. |
| Expected Results | There to be a equal amount of grandparents to persons labeled as grandparents. |
| Test Log Status | expected : 26 actual 26 TEST SUCCESSFUL |

TestGrandparents19 TEST

| Initial Conditions | Person,Relationship, Parent arrays are created using the parsefile which has 3 list of data to imported from. |
|--------------------|--|
| Input Test Data | A iterator is created using the person, Relationship List. Then we search for a individual person p1, and check the relationships connected too. |

| Expected Results | That a person node will connect to another person node based on the relationship of Grandparent. |
|------------------|--|
| Test Log Status | expected : p19 actual p19 TEST SUCCESSFUL |

TestGrand2 TEST

| Initial Conditions | Person,Relationship, Parent arrays are created using the parsefile which has 3 list of data to imported from. |
|--------------------|--|
| Input Test Data | A iterator is created using the person,Relationship List. Then we search for a individual person p19, and check the relationships connected too. |
| Expected Results | That a person node will connect to another person node based on the relationship of Grandparent |
| Test Log Status | expected : p1 actual p1 TEST SUCCESSFUL |

TestGrand20 TEST

| Initial Conditions | Person,Relationship, Parent arrays are created using the parsefile which has 3 list of data to imported from. |
|--------------------|---|
| Input Test Data | A iterator is created using the person, Relationship List. Then we search for a individual person p20, and check the relationships connected too. |
| Expected Results | That a person node will connect to another person node based on the relationship of Grandparent |
| Test Log Status | expected : p1 actual p1 TEST SUCCESSFUL |

TestGrand10 TEST

| Initial Conditions | Person,Relationship, Parent arrays are created using the parsefile which has 3 list of data to imported from. |
|--------------------|---|
| Input Test Data | A iterator is created using the person,Relationship List. Then we search for a individual person p10 , and check the relationships connected too. |
| Expected Results | That a person node will connect to another person node based on |

| | the relationship of Grandparent |
|-----------------|--|
| Test Log Status | expected : p1 actual p19 TEST SUCCESSFUL |

TestGrand8 TEST

| Initial Conditions | Person,Relationship, Parent arrays are created using the parsefile which has 3 list of data to imported from. |
|--------------------|--|
| Input Test Data | A iterator is created using the person, Relationship List. Then we search for a individual person p8, and check the relationships connected too. |
| Expected Results | That a person node will connect to another person node based on the relationship of Grandparent |
| Test Log Status | expected : p1 actual p1 TEST SUCCESSFUL |

TestGrand7 TEST

| Initial Conditions | Person,Relationship, Parent arrays are created using the parsefile which has 3 list of data to imported from. |
|--------------------|---|
| Input Test Data | A iterator is created using the person,Relationship List. Then we search for a individual person p7, and check the relationships connected too. |
| Expected Results | That a person node will connect to another person node based on the relationship of Grandparent |
| Test Log Status | expected : p9 actual p9 TEST SUCCESSFUL |

TestGrand6 TEST

| Initial Conditions | Person, Relationship, Parent arrays are created using the parsefile which has 3 list of data to imported from. | |
|--------------------|--|--|
| | | |

| Input Test Data | A iterator is created using the person,Relationship List. Then we search for a individual person p6, and check the relationships connected too. |
|------------------|---|
| Expected Results | That a person node will connect to another person node based on the relationship of Grandparent |
| Test Log Status | expected : p9 actual p9 TEST SUCCESSFUL |