Case Input

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| Case 1: | void class() { //wrong, uses “class” instead of “main”  boolean attendance, cancelled;  int total, students;  total = 20;  if(students>0)  attendence true;  else  attendance false;  while (students>total){  students = students - 1;  }  if (students<total && students>10)  cancelled = false;  else  cancelled = true;  } |
| Case 2: | void main() {  int whole, decimal;  whole = 16;  decimal = 4.4;  } |
| Case 3: | void main() {  int one, two;  boolean greater, lesser;  one = 36;  two = 25;  if(one>two)  greater = true;  if(two>one)  lesser = true;  } |
| Case 4: | void main() {  int min, max, range;  min = 0;  max = 10;  range = max - min;  } |
| Case 5: | void main() {  int number, check;  boolean even;  check = number%2;//modulo does NOT work in JAY  if (check = 0)  boolean = true;  else  check = false;  } |
| Case 6: | void main(){  int n;  int counter;  int sum;  sum = 0;  if(counter>=m) {  sum = sum + counter;  counter = counter + 1;  }  } |
| Case 7: | void main(){  int one;  int two;  int min;  if (one <= two )  min == one;  else  min == two;  } |
| Case 8: | void main() {  int temp;  boolean jacket;  temp = 40;  if (temp>40 | temp<60)  jacket = true;// yields lexical error for using | instead of ||  else  jacket = false;  } |
| Case 9: | void main() {  int temp;  boolean jacket;    temp = 40;    if (temp>40 || temp<60) //does this comment work?  jacket = true;  else  jacket = false;  } |
| Case 10: | void main(){  int number;  int counter;  number=1;  counter = 0;  while(number > counter)  number = number + counter;  counter = 0;  } |
| Case 11: | void main(){  int m;  int n;  int assignment;  if (m <= n)  assignment = m;  else  assignment = n;  } |
| Case 12: | void main(){  int m;  int n;  int assignment;  while (m <= n){  assignment = n;  n = m/2;  m = m - 1;  }  } |
| Case 13: | void main(){  int m;  int n;  int assignment;  while (m == n){  assignment = n;  n = m/2;  m = m - n;  }  } |
| Case 14: | void main(){  int this, that, theOther;  while (this > that){  if (this > theOther);  this = this/2;  else if (this < theOther)  theOther = theOther \* that;  else if (this == theOther)  that = 0;  else  this = theOther;  }  } |
| Case 15: | void main(){  boolean sum;  int counter;  while(counter<10) {  if(counter>1)  sum = sum + counter;  }  } |
| Case 16: | static main(){  //this program won't work because it starts with "static". JAY only accepts "void" to start.  int goals, assists, points;  boolean allStar;  points = goals + assists;  if (points >= 100 || goals >= 60 || assists >= 80)  allStar = true;  } |
| Case 17: | void main() {  int altitude, speed; //let's say meters and seconds  boolean astronaut;  altitude = 0;  speed = 790; // random number  while (speed > 0) {  altitude = altitude + speed;  speed = speed - (speed/(5.3));  }  if (altitude > 100000)  astronaut = true;  else  astronaut = false;  } |
| Case 18: | void main() {  int speed, time, lap, trackSize;  boolean worldRecord, win;    lap = 1;  time = 0;  trackSize = 2;  speed = 128;  while (lap <= 3) {  time = (speed/trackSize) + time;  lap = lap + 1;  }  if (time <= 540)  worldRecord = true;  if (worldRecord == true || time <= 640)  win = true;  lap = 0;  time = 0;  } |
| Case 19: | void main(){  int one, two; //Declaration    one = 4; //Statements  two = 16;  int sum, multipy; //Declaration    sum = one + two; //Statements  multiply = one \* two;    // this won't work in JAY because decalrations MUST come before statements.  //Above we have declarations and statements but then we use another declaration which is wrong.  } |
| Case 20: | void main(){  boolean one, two, sum; // won't work because booleans can only be true or false. This looks at it like an integer  one = 38;  two = one/3;  sum = one + two;  // doesn't yield a concrete syntax error, tho. will still be passed through parser.  } |
| Case 21: | void main() {  int rbi, homeruns;  int strike, strikeouts, outs;  if (homeruns > 0)  rbi = rbi + homeruns;  if (strike = 3) {  strikeouts = strikeouts + 1;  outs = outs + 1;  strike = 0;  }  if (outs = 3)  outs = 0;  } |
| Case 22: | void main(){  boolean dayOff, holiday, work, school;  if (work == true)  dayOff = false;  if (school == true)  work = false;  if (holiday == true || dayOff == true){  work = false;  school = false;  }  } |
| Case 23: | void main() {  int train, time;  boolean delay, early;  if (train > (time+3))  delay = true;  if (train < (time-3))  early = true;  if (delay = true)  early = false;  if (early = true)  delay = false;  } |
| Case 24: | void main() {  int temp, inchesOfSnow;  boolean skiing;  if (temp <= 36, inchesOfSnow >= 2)  skiing = true; //this isn't going to work because the use of "," instead of "&&". JAY only excepts &&  else  skiing = false;  } |
| Case 25: | void main() {  int age;  boolean baby, child, teen, adult, senior;  if (age < 4)  baby = true;  if (age >= 4 && age < 13)  child = true;  if (age >= 13 && age < 18)  teen = true;  if (age >= 18)  adult = true;  if (age = 18 || age = 19) {  teen = true;  adult = true;  }  if (age >= 65) {  adult = true;  senior = true;  }  } |
| Case 26: | void main() {  void main() {  boolean confusion, enlightenment;  confusion = true;  if (enlightenment = true)  confusion = false;  }  } |

Case Output

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| Case 1: | test1  test2  Syntax error - Expecting: main But saw: Identifier = class  Exception in thread "main" java.lang.RuntimeException: Syntax error - Expecting: main But saw: Identifier = class  at ConcreteSyntax.match(ConcreteSyntax.java:40)  at ConcreteSyntax.program(ConcreteSyntax.java:51)  at ParserDemo.main(ParserDemo.java:8) |
| Case 2: | test1  test2  Syntax error - Expecting: Identifier | Literal | ( But saw: Other = 4.4  Exception in thread "main" java.lang.RuntimeException: Syntax error - Expecting: Identifier | Literal | ( But saw: Other = 4.4  at ConcreteSyntax.factor(ConcreteSyntax.java:285)  at ConcreteSyntax.negation(ConcreteSyntax.java:257)  at ConcreteSyntax.term(ConcreteSyntax.java:235)  at ConcreteSyntax.addition(ConcreteSyntax.java:219)  at ConcreteSyntax.relation(ConcreteSyntax.java:199)  at ConcreteSyntax.conjunction(ConcreteSyntax.java:183)  at ConcreteSyntax.expression(ConcreteSyntax.java:167)  at ConcreteSyntax.assignment(ConcreteSyntax.java:156)  at ConcreteSyntax.statement(ConcreteSyntax.java:130)  at ConcreteSyntax.statements(ConcreteSyntax.java:140)  at ConcreteSyntax.program(ConcreteSyntax.java:54)  at ParserDemo.main(ParserDemo.java:8) |
| Case 3: | test1  test2  Abstract syntax of the JAY 2006 Program:  Declarations:  Declarations = {<one, int>, <two, int>, <greater, boolean>, <lesser, boolean>}  Block:  Assignment:  Variable: one  Value: 36  Assignment:  Variable: two  Value: 25  Conditional:  Binary:  Operator: >  Variable: one  Variable: two  Assignment:  Variable: greater  Variable: true  Conditional:  Binary:  Operator: >  Variable: two  Variable: one  Assignment:  Variable: lesser  Variable: true  test |
| Case 4: | test1  test2  Abstract syntax of the JAY 2006 Program:  Declarations:  Declarations = {<min, int>, <max, int>, <range, int>}  Block:  Assignment:  Variable: min  Value: 0  Assignment:  Variable: max  Value: 10  Assignment:  Variable: range  Binary:  Operator: -  Variable: max  Variable: min  test |
| Case 5: | test1  test2  Syntax error - Expecting: Identifier | Literal | ( But saw: Other = number%2  Exception in thread "main" java.lang.RuntimeException: Syntax error - Expecting: Identifier | Literal | ( But saw: Other = number%2  at ConcreteSyntax.factor(ConcreteSyntax.java:286)  at ConcreteSyntax.negation(ConcreteSyntax.java:258)  at ConcreteSyntax.term(ConcreteSyntax.java:236)  at ConcreteSyntax.addition(ConcreteSyntax.java:220)  at ConcreteSyntax.relation(ConcreteSyntax.java:200)  at ConcreteSyntax.conjunction(ConcreteSyntax.java:184)  at ConcreteSyntax.expression(ConcreteSyntax.java:168)  at ConcreteSyntax.assignment(ConcreteSyntax.java:157)  at ConcreteSyntax.statement(ConcreteSyntax.java:130)  at ConcreteSyntax.statements(ConcreteSyntax.java:141)  at ConcreteSyntax.program(ConcreteSyntax.java:54)  at ParserDemo.main(ParserDemo.java:8) |
| Case 6: | test1  test2  Abstract syntax of the JAY 2006 Program:  Declarations:  Declarations = {<n, int>, <counter, int>, <sum, int>}  Block:  Assignment:  Variable: sum  Value: 0  Conditional:  Binary:  Operator: >=  Variable: counter  Variable: m  Block:  Assignment:  Variable: sum  Binary:  Operator: +  Variable: sum  Variable: counter  Assignment:  Variable: counter  Binary:  Operator: +  Variable: counter  Value: 1  test |
| Case 7: | test1  test2  Syntax error - Expecting: = But saw: Operator = ==  Exception in thread "main" java.lang.RuntimeException: Syntax error - Expecting: = But saw: Operator = ==  at ConcreteSyntax.match(ConcreteSyntax.java:40)  at ConcreteSyntax.assignment(ConcreteSyntax.java:154)  at ConcreteSyntax.statement(ConcreteSyntax.java:130)  at ConcreteSyntax.ifStatement(ConcreteSyntax.java:299)  at ConcreteSyntax.statement(ConcreteSyntax.java:125)  at ConcreteSyntax.statements(ConcreteSyntax.java:140)  at ConcreteSyntax.program(ConcreteSyntax.java:54)  at ParserDemo.main(ParserDemo.java:8) |
| Case 8: | test1  test2  Syntax error - Expecting: ) But saw: Operator = |  Exception in thread "main" java.lang.RuntimeException: Syntax error - Expecting: ) But saw: Operator = |  at ConcreteSyntax.match(ConcreteSyntax.java:40)  at ConcreteSyntax.ifStatement(ConcreteSyntax.java:298)  at ConcreteSyntax.statement(ConcreteSyntax.java:125)  at ConcreteSyntax.statements(ConcreteSyntax.java:140)  at ConcreteSyntax.program(ConcreteSyntax.java:54)  at ParserDemo.main(ParserDemo.java:8) |
| Case 9: | test1  test2  Abstract syntax of the JAY 2006 Program:  Declarations:  Declarations = {<temp, int>, <jacket, boolean>}  Block:  Assignment:  Variable: temp  Value: 40  Conditional:  Binary:  Operator: ||  Binary:  Operator: >  Variable: temp  Value: 40  Binary:  Operator: <  Variable: temp  Value: 60  Assignment:  Variable: jacket  Variable: true  Assignment:  Variable: jacket  Variable: false  test |
| Case 10: | test1  test2  Abstract syntax of the JAY 2006 Program:  Declarations:  Declarations = {<number, int>, <counter, int>}  Block:  Assignment:  Variable: number  Value: 1  Assignment:  Variable: counter  Value: 0  Loop:  Binary:  Operator: >  Variable: number  Variable: counter  Assignment:  Variable: number  Binary:  Operator: +  Variable: number  Variable: counter  Assignment:  Variable: counter  Value: 0  test |
| Case 11: | test1  test2  Abstract syntax of the JAY 2006 Program:  Declarations:  Declarations = {<m, int>, <n, int>, <assignment, int>}  Block:  Conditional:  Binary:  Operator: <=  Variable: m  Variable: n  Assignment:  Variable: assignment  Variable: m  Assignment:  Variable: assignment  Variable: n  test |
| Case 12: | test1  test2  Abstract syntax of the JAY 2006 Program:  Declarations:  Declarations = {<m, int>, <n, int>, <assignment, int>}  Block:  Loop:  Binary:  Operator: <=  Variable: m  Variable: n  Block:  Assignment:  Variable: assignment  Variable: n  Assignment:  Variable: n  Binary:  Operator: /  Variable: m  Value: 2  Assignment:  Variable: m  Binary:  Operator: -  Variable: m  Value: 1  test |
| Case 13: | test1  test2  Abstract syntax of the JAY 2006 Program:  Declarations:  Declarations = {<m, int>, <n, int>, <assignment, int>}  Block:  Loop:  Binary:  Operator: ==  Variable: m  Variable: n  Block:  Assignment:  Variable: assignment  Variable: n  Assignment:  Variable: n  Binary:  Operator: /  Variable: m  Value: 2  Assignment:  Variable: m  Binary:  Operator: -  Variable: m  Value: 1  Test |
| Case 14: | test1  test2  Syntax error - Expecting: Statement But saw: Operator = =  Exception in thread "main" java.lang.RuntimeException: Syntax error - Expecting: Statement But saw: Operator = =  at ConcreteSyntax.statement(ConcreteSyntax.java:133)  at ConcreteSyntax.statements(ConcreteSyntax.java:141)  at ConcreteSyntax.statement(ConcreteSyntax.java:122)  at ConcreteSyntax.whileStatement(ConcreteSyntax.java:317)  at ConcreteSyntax.statement(ConcreteSyntax.java:128)  at ConcreteSyntax.statements(ConcreteSyntax.java:141)  at ConcreteSyntax.program(ConcreteSyntax.java:54)  at ParserDemo.main(ParserDemo.java:8) |
| Case 15: | test1 test2 Exception in thread "main" java.lang.NullPointerException  at ConcreteSyntax.statement(ConcreteSyntax.java:129)  at ConcreteSyntax.statements(ConcreteSyntax.java:141)  at ConcreteSyntax.program(ConcreteSyntax.java:54)  at ParserDemo.main(ParserDemo.java:8) |
| Case 16: | test1  test2  Syntax error - Expecting: void But saw: Identifier = static  Exception in thread "main" java.lang.RuntimeException: Syntax error - Expecting: void But saw: Identifier = static  at ConcreteSyntax.match(ConcreteSyntax.java:40)  at ConcreteSyntax.program(ConcreteSyntax.java:51)  at ParserDemo.main(ParserDemo.java:8) |
| Case 17: | test1  test2  Abstract syntax of the JAY 2006 Program:  Declarations:  Declarations = {<altitude, int>, <speed, int>, <astronaut, boolean>}  Block:  Assignment:  Variable: altitude  Value: 0  Assignment:  Variable: speed  Value: 790  Loop:  Binary:  Operator: >  Variable: speed  Value: 0  Block:  Assignment:  Variable: altitude  Binary:  Operator: +  Variable: altitude  Variable: speed  Assignment:  Variable: speed  Binary:  Operator: -  Variable: speed  Binary:  Operator: /  Variable: speed  Binary:  Operator: /  Value: 5  Value: 3  Conditional:  Binary:  Operator: >  Variable: altitude  Value: 100000  Assignment:  Variable: astronaut  Variable: true  Assignment:  Variable: astronaut  Variable: false  test |
| Case 18: | test1  test2  Syntax error - Expecting: Statement But saw: Separator = (  Exception in thread "main" java.lang.RuntimeException: Syntax error - Expecting: Statement But saw: Separator = (  at ConcreteSyntax.statement(ConcreteSyntax.java:133)  at ConcreteSyntax.statements(ConcreteSyntax.java:141)  at ConcreteSyntax.program(ConcreteSyntax.java:54)  at ParserDemo.main(ParserDemo.java:8) |
| Case 19: | test1  test2  Syntax error - Expecting: Statement But saw: Keyword = int  Exception in thread "main" java.lang.RuntimeException: Syntax error - Expecting: Statement But saw: Keyword = int  at ConcreteSyntax.statement(ConcreteSyntax.java:133)  at ConcreteSyntax.statements(ConcreteSyntax.java:141)  at ConcreteSyntax.program(ConcreteSyntax.java:54)  at ParserDemo.main(ParserDemo.java:8) |
| Case 20: | test1  test2  Abstract syntax of the JAY 2006 Program:  Declarations:  Declarations = {<one, boolean>, <two, boolean>, <sum, boolean>}  Block:  Assignment:  Variable: one  Value: 38  Assignment:  Variable: two  Binary:  Operator: /  Variable: one  Value: 3  Assignment:  Variable: sum  Binary:  Operator: +  Variable: one  Variable: two  test |
| Case 21: | test1  test2  Syntax error - Expecting: Statement But saw: Separator = (  Exception in thread "main" java.lang.RuntimeException: Syntax error - Expecting: Statement But saw: Separator = (  at ConcreteSyntax.statement(ConcreteSyntax.java:133)  at ConcreteSyntax.statements(ConcreteSyntax.java:141)  at ConcreteSyntax.program(ConcreteSyntax.java:54)  at ParserDemo.main(ParserDemo.java:8) |
| Case 22: | test1  test2  Syntax error - Expecting: ) But saw: Operator = =  Exception in thread "main" java.lang.RuntimeException: Syntax error - Expecting: ) But saw: Operator = =  at ConcreteSyntax.match(ConcreteSyntax.java:40)  at ConcreteSyntax.ifStatement(ConcreteSyntax.java:299)  at ConcreteSyntax.statement(ConcreteSyntax.java:125)  at ConcreteSyntax.statements(ConcreteSyntax.java:141)  at ConcreteSyntax.program(ConcreteSyntax.java:54)  at ParserDemo.main(ParserDemo.java:8) |
| Case 23: | test1  test2  Syntax error - Expecting: Statement But saw: Separator = (  Exception in thread "main" java.lang.RuntimeException: Syntax error - Expecting: Statement But saw: Separator = (  at ConcreteSyntax.statement(ConcreteSyntax.java:133)  at ConcreteSyntax.statements(ConcreteSyntax.java:141)  at ConcreteSyntax.program(ConcreteSyntax.java:54)  at ParserDemo.main(ParserDemo.java:8) |
| Case 24: | test1  test2  Syntax error - Expecting: ) But saw: Separator = ,  Exception in thread "main" java.lang.RuntimeException: Syntax error - Expecting: ) But saw: Separator = ,  at ConcreteSyntax.match(ConcreteSyntax.java:40)  at ConcreteSyntax.ifStatement(ConcreteSyntax.java:298)  at ConcreteSyntax.statement(ConcreteSyntax.java:125)  at ConcreteSyntax.statements(ConcreteSyntax.java:140)  at ConcreteSyntax.program(ConcreteSyntax.java:54)  at ParserDemo.main(ParserDemo.java:8) |
| Case 25: | test1  test2  Syntax error - Expecting: Statement But saw: Separator = (  Exception in thread "main" java.lang.RuntimeException: Syntax error - Expecting: Statement But saw: Separator = (  at ConcreteSyntax.statement(ConcreteSyntax.java:133)  at ConcreteSyntax.statements(ConcreteSyntax.java:141)  at ConcreteSyntax.program(ConcreteSyntax.java:54)  at ParserDemo.main(ParserDemo.java:8) |
| Case 26: | test1  test2  Syntax error - Expecting: Statement But saw: Keyword = void  Exception in thread "main" java.lang.RuntimeException: Syntax error - Expecting: Statement But saw: Keyword = void  at ConcreteSyntax.statement(ConcreteSyntax.java:132)  at ConcreteSyntax.statements(ConcreteSyntax.java:140)  at ConcreteSyntax.program(ConcreteSyntax.java:54)  at ParserDemo.main(ParserDemo.java:8) |