



COMP - Semantic Analysis I (MIEIC - Compilers - 2021)

131

Responses

2.1

Average Score

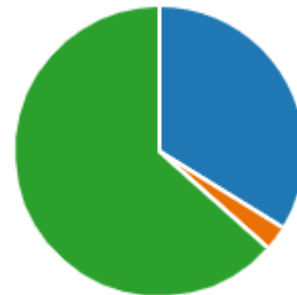
Active

Status

1. Select the codes for which you expect that javac (the java compiler) reports a semantic error (assume that the methods are part of well-formed Java classes: (a) `int f1(int A[]) { int i = -1; return A[i]; }` (b) `int f2(boolean b) { int c; if(b) { c=1; } else { c=2; } return c; }` (c) `int f3(int A[]) { int b=1; int c; while(b < 20) { c=b; b++; } return c; }` (1 point)

59% of respondents (77 of 130) answered this question correctly.

(a)	49
(b)	4
(c)	92 ✓



2. Select the codes for which you expect that javac (the java compiler) reports a semantic error (assume that the methods are part of well-formed Java classes: (a) `int f4(int b) { int c; if(b>1) if(b<10) c=1; else c = 2; else c=2; return c; }` (b) `int f5(int b) { int c; if(b>1) { if(b<10) c=1; if(b>=10) c = 2; } else c=2; return c; }` (c) `int f6(int b) { int c; if(b>1) if(b<10) c=1; else if(b==3) c = 2; else if(b==2) c = 4; else c = 5; else c=2; return c; }` (1 point)

68% of respondents (88 of 130) answered this question correctly.

(a)	10
(b)	88 ✓
(c)	32



3. Select the option regarding the result of the semantic analysis of the following Java method: 1. public static void main(String args[]) { 2. int d1, d2; 3. int a= 5; 4. int b=2; 5. double c =2d; 6. 7. d1 = (int) (a*b*c); 8. d2 = (int) a*b*c; 9. System.out.println("d1: "+d1+"\n"); 10. System.out.println("d2: "+d2+"\n"); 11. } (1 point)

83% of respondents (109 of 131) answered this question correctly.

- The code is semantically correct 14
- There is a semantic error in lin... 8
- There is a semantic error in lin... 109 ✓



4. Select the option regarding the following Java statement: long a = 140737488355328; (1 point)
- 1% of respondents (1 of 131) answered this question correctly.

- The code is correct; 23
- The code has a semantic error... 95
- The code has a syntactic error ... 12
- The code has a semantic error... 1 ✓

