COMP3173 22F

Project

**Grammar**

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| (0) | A.𝑡𝑦𝑝𝑒≔.𝑡𝑦𝑝𝑒 |
|  | B.𝑡𝑦𝑝𝑒≔.𝑡𝑦𝑝𝑒 |
|  | B.𝑡𝑦𝑝𝑒≔.𝑡𝑦𝑝𝑒 |
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|  | F.𝑡𝑦𝑝𝑒≔lit.𝑡𝑦𝑝𝑒 |
|  | C.𝑡𝑦𝑝𝑒≔.𝑡𝑦𝑝𝑒 |
|  | C.𝑡𝑦𝑝𝑒≔.𝑡𝑦𝑝𝑒 |
|  | C.𝑡𝑦𝑝𝑒≔.𝑡𝑦𝑝𝑒 |
|  | C.𝑡𝑦𝑝𝑒≔.𝑡𝑦𝑝𝑒 |
|  | 𝑖𝑓(P.𝑡𝑦𝑝𝑒==Boolean. Type)  𝑡ℎ𝑒𝑛 L.𝑡𝑦𝑝𝑒≔C.𝑡𝑦𝑝𝑒  𝑒𝑙𝑠𝑒 L.𝑡𝑦𝑝𝑒≔𝑡𝑦𝑝𝑒\_𝑒𝑟𝑟𝑜r |
|  | 𝑖𝑓(P.𝑡𝑦𝑝𝑒==Boolean. Type)  𝑡ℎ𝑒𝑛 L.𝑡𝑦𝑝𝑒≔C.𝑡𝑦𝑝𝑒  𝑒𝑙𝑠𝑒 L.𝑡𝑦𝑝𝑒≔𝑡𝑦𝑝𝑒\_𝑒𝑟𝑟𝑜r |
|  | 𝑖𝑓(P) |
|  | P.𝑡𝑦𝑝𝑒≔Q.𝑡𝑦𝑝𝑒 |
|  | 𝑖𝑓() |
|  | Q.𝑡𝑦𝑝𝑒 ≔U.𝑡𝑦𝑝𝑒 |
|  | 𝑖𝑓() |
|  | U.𝑡𝑦𝑝𝑒 ≔.𝑡𝑦𝑝𝑒 |
|  | V.𝑡𝑦𝑝𝑒 ≔.𝑡𝑦𝑝𝑒 |
|  | V.𝑡𝑦𝑝𝑒 ≔.𝑡𝑦𝑝𝑒 |
|  | If (E.𝑡𝑦𝑝𝑒==int.𝑡𝑦𝑝𝑒 and E.𝑡𝑦𝑝𝑒==lookup(id.entry))  𝑡ℎ𝑒𝑛 R.𝑡𝑦𝑝𝑒≔boolean.𝑡𝑦𝑝𝑒  𝑒𝑙𝑠𝑒 R.𝑡𝑦𝑝𝑒≔𝑡𝑦𝑝𝑒\_𝑒𝑟𝑟𝑜𝑟 |
|  | If (E.𝑡𝑦𝑝𝑒==Boolean. 𝑡𝑦𝑝𝑒and E.𝑡𝑦𝑝𝑒==lookup(id.entry))  𝑡ℎ𝑒𝑛 R.𝑡𝑦𝑝𝑒≔boolean.𝑡𝑦𝑝𝑒  𝑒𝑙𝑠𝑒 R.𝑡𝑦𝑝𝑒≔𝑡𝑦𝑝𝑒\_𝑒𝑟𝑟𝑜𝑟 |
|  | R.𝑡𝑦𝑝𝑒≔lit.𝑡𝑦𝑝𝑒 |