The grammar indicates all the binary number which is divisible by 4. The grammar would only accept those binary numbers starting with 1.

|  |  |
| --- | --- |
| **Rules** | **Attribute Grammars** |
| number 🡪 finalbit list doublezero | finalbit.position = list.position + 1,  number.value = finalbit.value + list.value |
| number 🡪 0 | number.value = 0 |
| list0 🡪 1 list1 | list0.position = list1.position + 1,  list0.value = 2list0.position + list1.value |
| list0 🡪 0 list1 | list0.position = list1.position + 1,  list0.value = list1.value |
| list 🡪 ­ | list.position = 1,  list.value = 0 |
| finalbit 🡪 1 | finalbit.value = 2finalbit.position |
| doublezero 🡪 00 | doublezero.value = 0,  doublezero.position = 1  /\*this is irrelevant anyways\*/ |