***Variant 8.***

$V_N$={S, D,E, J},

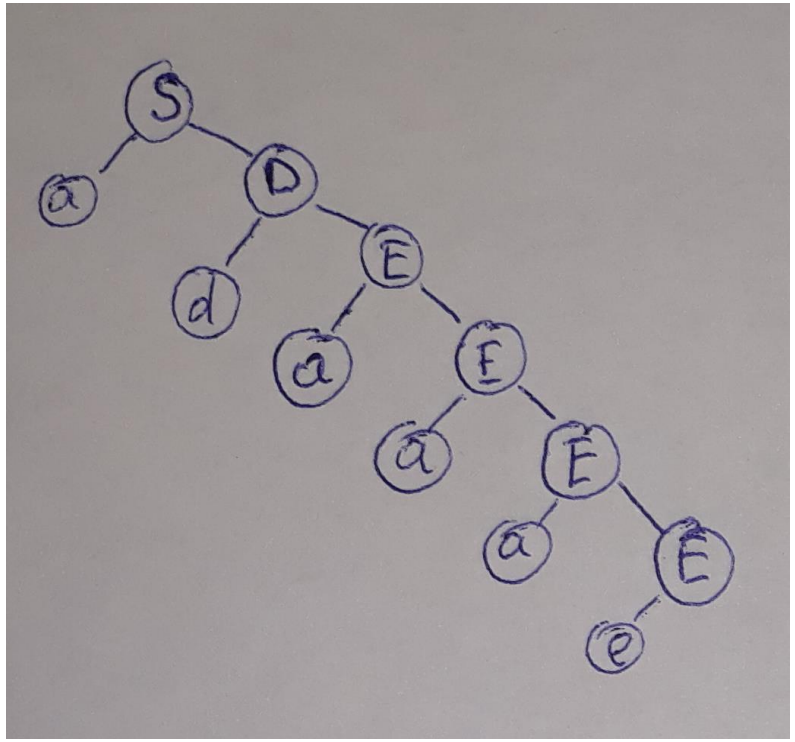
$V_T$={a, b, c, d, e} ,

P= {

1. S → aD
2. D → dE
3. D → bJ
4. J → cS
5. E → e
6. E → aE
7. D → aE }

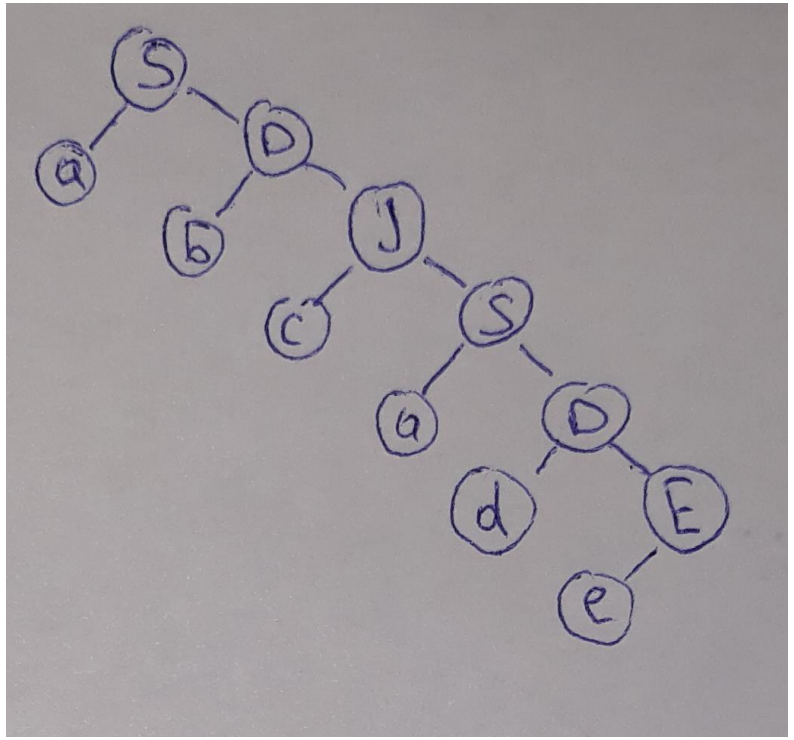
# Word 1: adaaae

| Rule | Derivation |
|---|---|
| S→aD | aD |
| D→dE | adE |
| E→aE | adaE |
| E→aE | adaaE |
| E→aE | adaaaE |
| E→e | adaaae |



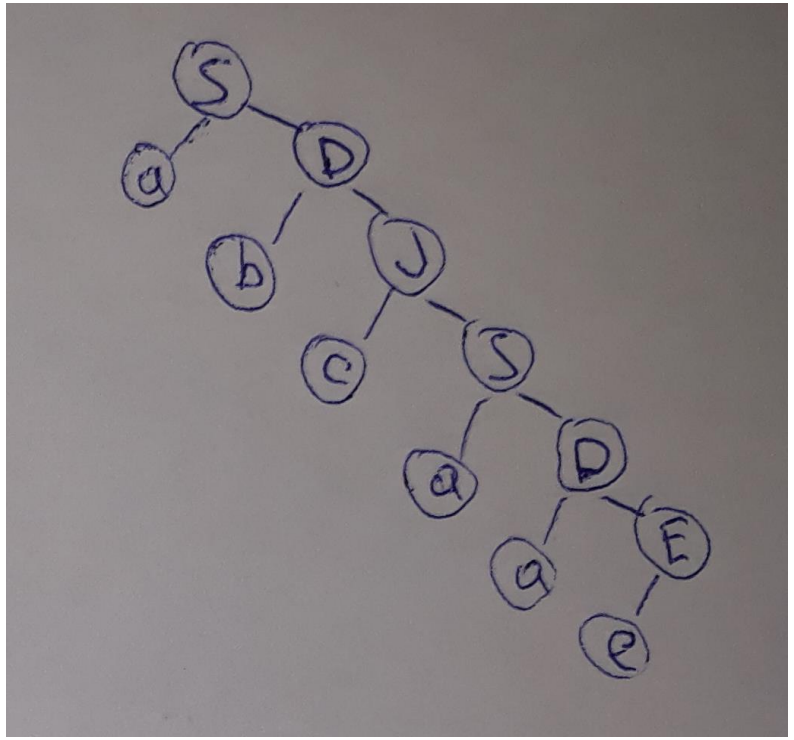
# Word 2: abcade

| Rule | Derivation |
|---|---|
| S→aD | aD |
| D→bJ | abJ |
| J→cS | abcS |
| S→aD | abcaD |
| D→dE | abcadE |
| E→e | abcade |



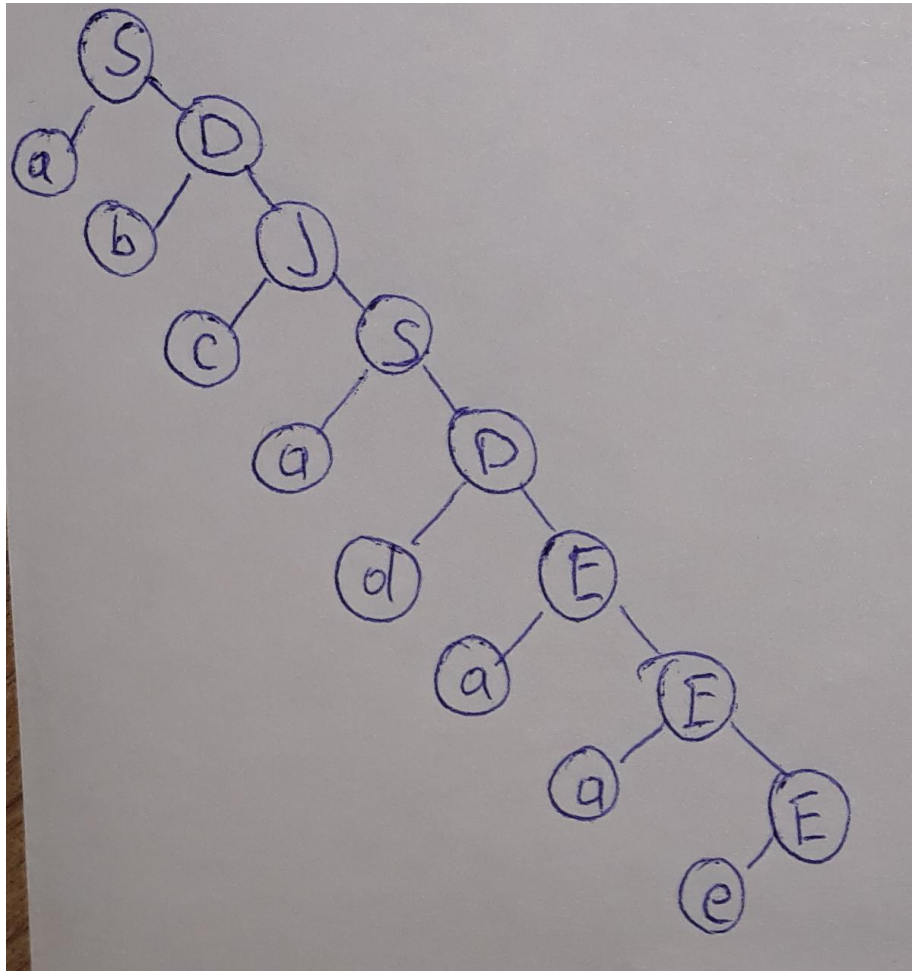
# Word 3: abcaae

| Rule | Derivation |
|---|---|
| S→aD | aD |
| D→bJ | abJ |
| J→cS | abcS |
| S→aD | abcaD |
| D→aE | abcaaE |
| E→e | abcaae |



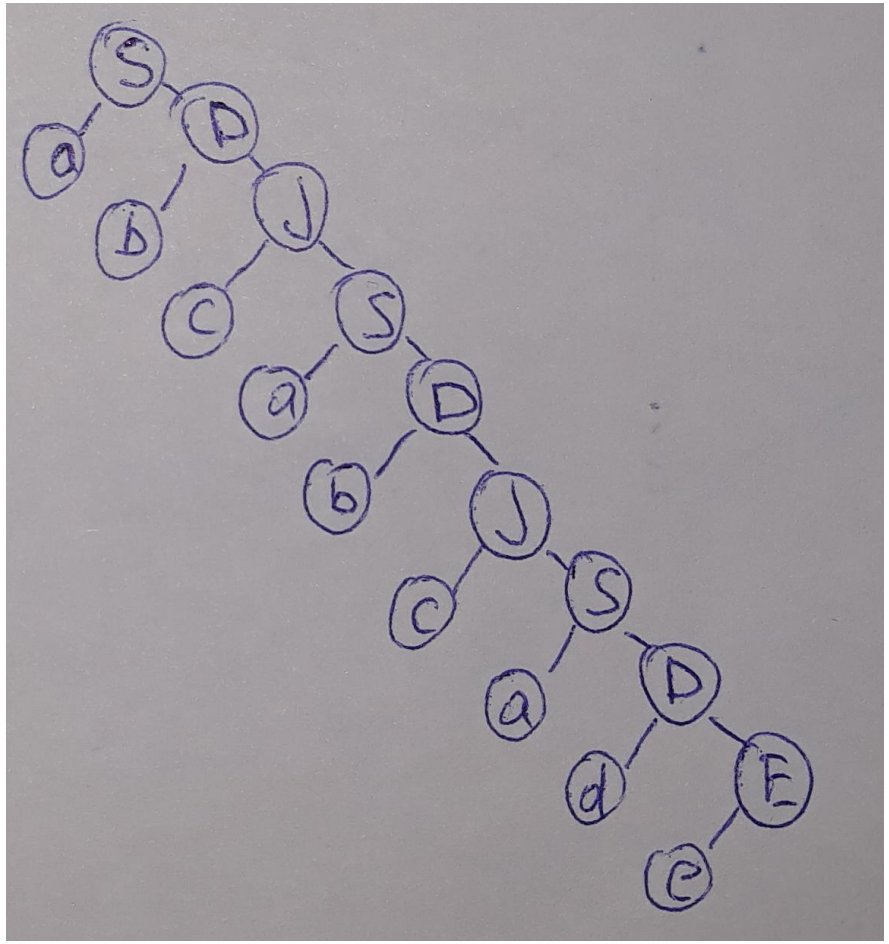
# Word 4: abcadaae

| Rule | Derivation |
|---|---|
| S→aD | aD |
| D→bJ | abJ |
| J→cS | abcS |
| S→aD | abcaD |
| D→dE | abcadE |
| E→aE | abcadaE |
| E→aE | abcadaaE |
| E→e | abcadaae |

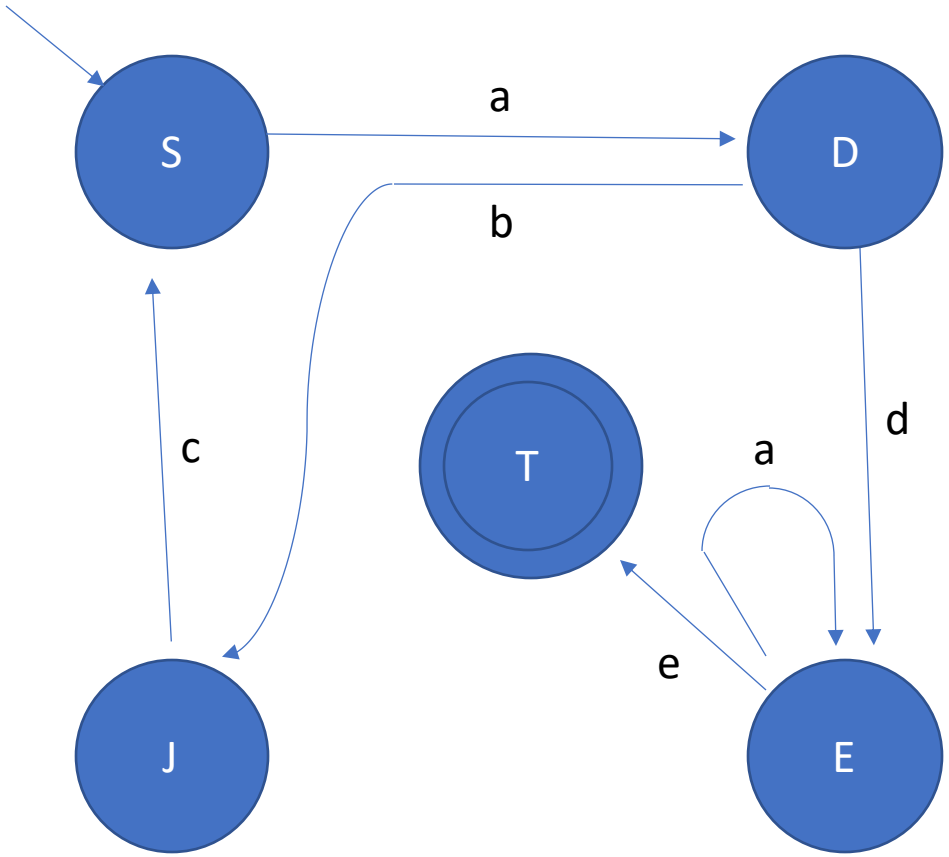


# Word 5: abcabcade

| Rule | Derivation |
|---|---|
| S→aD | aD |
| D→bJ | abJ |
| J→cS | abcS |
| S→aD | abcaD |
| D→bJ | abcabJ |
| J→cS | abcabcS |
| S→aD | abcabcaD |
| D→dE | abcabcadE |
| E→e | abcabcade |



# Finite Automation




This is a type 3 (regular) grammar