Tugas Analisis Sintaksis dan Morphology Kata

****

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Soal :

Buat FST untuk memeriksa masukan user berupa kata kerja aktif berawalan me-

1. me + ng + (KD berawalan k) –k
2. me + ng + (KD berawalan vokal, g, h, q)
3. me + n + (KD berawalan t) –t
4. me + n + (KD berawalan c, d, j, z)
5. me + ny + (KD berawalan s) –s
6. me + m + (KD berawalan p) –p
7. me + m + (KD berawalan f, v)
8. me + KD berawalan kecuali selain yang diberikan
9. x,y?

Jawaban :

Lexicon :

Lexicon adalah daftar stem (kata dasar) dan imbuhan serta informasi tentangnya

me + ng + kirim (mengirim)

me + ng + ikat (mengikat)

me + ng + goring (menggoreng)

me + ng + hilang (menghilang)

me + ng + q...

me + n + tanam (menanam)

me + n + curi (mencuri)

me + n + data (mendata)

me + n + jahit (menjahit)

me + n + zalim (menzalimi)

me + ny + sikat (menyikat)

me + m + pasang (memasang)

me + m + fitnah (memfitnah)

me + m + verifikasi (memverifikasi)

me + lihat (melihat)

me + maki (memaki)

me + rampok (merampok)

me + nafkah (menafkahi)

me + wadah (mewadahi)

me + m + beku (membeku)

me + yakin (meyakini)

**Morphotactic :**

Morphotactic adalah model penyusunan morfem yang bisa menjelaskan morfem-morfem tertentu diikuti oleh morfem lainnya, sehingga dapat diartikan bahwa morphotactic merupakan proses pengubahan lexicon menjadi bentuk intermediatenya sehingga masih dalam bentuk kasar karena hanya sekedar menambahkan imbuhan dengan kata dasarnya. Secara etimologis dapat diartikan sebagai seperangkat aturan yang menentukan bagaimana morfem (morfo) dapat saling menyentuh (taktik).

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| K | I | R | I | M | +V | +T |  |  |  |

Lexical

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| M | E | ^ | K | I | R | I | M | # |  |

Intermediate

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| H | I | L | A | N | G | +V | +T |  |  |

Lexical

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| M | E | ^ | H | I | L | A | N | G | # |

Intermediate

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| G | O | R | E | N | G | +V | +T |  |  |

Lexical

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| M | E | ^ | G | O | R | E | N | G | # |

Intermediate

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| I | K | A | T | +V | +T |  |  |  |  |

Lexical

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| M | E | ^ | I | K | A | T | # |  |  |

Intermediate

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| T | A | N | A | M | +V | +T |  |  |  |

Lexical

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| M | E | ^ | T | A | N | A | M | # |  |

Intermediate

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| C | U | R | I | +V | +T |  |  |  |  |

Lexical

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| M | E | ^ | C | U | R | I | # |  |  |

Intermediate

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| J | A | H | I | T | +V | +T |  |  |  |

Lexical

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| M | E | ^ | J | A | H | I | T | # |  |

Intermediate

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| D | A | T | A | +N | +T |  |  |  |  |

Lexical

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| M | E | ^ | D | A | T | A | # |  |  |

Intermediate

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Z | A | L | I | M | +A | +I |  |  |  |  |

Lexical

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| M | E | ^ | Z | A | L | I | M | ^ | I | # |

Intermediate

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| S | I | K | A | T | +N | +T |  |  |  |

Lexical

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| M | E | ^ | S | I | K | A | T | # |  |

Intermediate

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P | A | S | A | N | G | +V | +T |  |  |

Lexical

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| M | E | ^ | P | A | S | A | N | G | # |

Intermediate

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| F | I | T | N | A | H | +N | +T |  |  |

Lexical

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| M | E | ^ | F | I | T | N | A | H | # |

Intermediate

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| V | E | R | I | F | I | K | A | S | I | +N | +T |  |  |

Lexical

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| M | E | ^ | V | E | R | I | F | I | K | A | S | I | # |

Intermediate

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| B | E | K | U | +A | +I |  |  |  |  |

Lexical

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| M | E | ^ | B | E | K | U | # |  |  |

Intermediate

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| L | I | H | A | T | +V | +T |  |  |  |

Lexical

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| M | E | ^ | L | I | H | A | T | # |  |

Intermediate

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| M | A | K | I | +V | +T |  |  |

Lexical

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| M | E | ^ | M | A | K | I | # |

Intermediate

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| R | A | M | P | O | K | +N | +T |  |  |

Lexical

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| M | E | ^ | R | A | M | P | O | K | # |

Intermediate

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| N | A | F | K | A | H | +N | +T |  |  |  |  |

Lexical

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| M | E | ^ | N | A | F | K | A | H | ^ | I | # |

Intermediate

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| W | A | D | A | H | +N | +T |  |  |

Lexical

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| M | E | ^ | W | A | D | A | H | # |

Intermediate

**Orthographic :**

Orthographic adalah pengubahan yang terjadi pada suatu kata apabila dua morfem digabungkan (aturan pengejaan), dapat disimpulkan bahwa orthographic merupakan proses pengubahan dari lexicon ke surface yang dalam bentuk surfacenya didapat dari menerapkan aturan-aturan (Ortographic Rule : aturan umum yang digunakan ketika memecah suatu kata ke bentuk stem dan pengubahnya) yang dibuat sedemikian rupa mengikuti pola pengejaan dalam Bahasa Indonesia

Orthographic Rule

|  |  |  |
| --- | --- | --- |
| Nama | Deskripsi Peraturan | Contoh |
| K Replacement | Merubah ng pada huruf awal KD berawalan k setelah me- | kirim -> mengirim |
| NG Insertion | Menambah ng sebelum KD berawalan a,i,u,e,o,g,h,q setelah me- | ikat -> mengikat  goreng -> menggoreng  hilang -> menghilang  q |
| T Replacement | Merubah n pada huruf awal KD berawalan t setelah me- | tanam -> menanam |
| N Insertion | Menambah n sebelum KD berawalan c,d,j,z setelah me- | curi -> mencuri  data -> mendata  jahit -> menjahit  zalim -> menzalimi |
| S Replacement | Merubah ny pada huruf awal KD berawalan s setelah me- | sikat -> menyikat |
| P Replacement | Merubah m pada huruf awal KD berawalan p setelah me- | pasang -> memasang |
| M Insertion | Menambah m sebelum KD berawalan f,v,b setelah me- | fitnah -> memfitnah  verifikasi -> memverifikasi  beku -> membeku |
| ME Insertion | Menambah me- sebelum KD berawalan l,m,n,r,w | lihat -> melihat  maki -> memaki  nafkah -> menafkahi  rampok -> merampok  wadah -> mewadah |

**K Replacement**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| K | I | R | I | M | +V | +T |  |  |  |

Lexical

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| M | E | ^ | K | I | R | I | M | # |  |

Intermediate

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| M | E | N | G | I | R | I | M |  |  |

Surface

**NG Insertion**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| H | I | L | A | N | G | +V | +T |  |  |

Lexical

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| M | E | ^ | H | I | L | A | N | G | # |

Intermediate

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| M | E | N | G | H | I | L | A | N | G |

Surface

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| G | O | R | E | N | G | +V | +T |  |  |

Lexical

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| M | E | ^ | G | O | R | E | N | G | # |

Intermediate

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| M | E | N | G | G | O | R | E | N | G |

Surface

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| I | K | A | T | +V | +T |  |  |  |  |

Lexical

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| M | E | ^ | I | K | A | T | # |  |  |

Intermediate

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| M | E | N | G | I | K | A | T |  |  |

Surface

**T Replacement**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| T | A | N | A | M | +V | +T |  |  |  |

Lexical

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| M | E | ^ | T | A | N | A | M | # |  |

Intermediate

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| M | E | N | A | N | A | M |  |  |  |

Surface

**N Insertion**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| C | U | R | I | +V | +T |  |  |  |  |

Lexical

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| M | E | ^ | C | U | R | I | # |  |  |

Intermediate

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| M | E | N | C | U | R | I |  |  |  |

Surface

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| J | A | H | I | T | +V | +T |  |  |  |

Lexical

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| M | E | ^ | J | A | H | I | T | # |  |

Intermediate

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| M | E | N | J | A | H | I | T |  |  |

Surface

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| D | A | T | A | +N | +T |  |  |  |  |

Lexical

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| M | E | ^ | D | A | T | A | # |  |  |

Intermediate

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| M | E | N | D | A | T | A |  |  |  |

Surface

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Z | A | L | I | M | +A | +I |  |  |  |  |

Lexical

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| M | E | ^ | Z | A | L | I | M | ^ | I | # |

Intermediate

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| M | E | N | Z | A | L | I | M | I |  |  |

Surface

**S Replacement**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| S | I | K | A | T | +N | +T |  |  |  |

Lexical

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| M | E | ^ | S | I | K | A | T | # |  |

Intermediate

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| M | E | N | Y | I | K | A | T |  |  |

Surface

**P replacement**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P | A | S | A | N | G | +V | +T |  |  |

Lexical

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| M | E | ^ | P | A | S | A | N | G | # |

Intermediate

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| M | E | M | A | S | A | N | G |  |  |

Surface

**M Insertion**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| F | I | T | N | A | H | +N | +T |  |  |

Lexical

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| M | E | ^ | F | I | T | N | A | H | # |

Intermediate

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| M | E | M | F | I | T | N | A | H |  |

Surface

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| V | E | R | I | F | I | K | A | S | I | +N | +T |  |  |

Lexical

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| M | E | ^ | V | E | R | I | F | I | K | A | S | I | # |

Intermediate

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| M | E | M | V | E | R | I | F | I | K | A | S | I |  |

Surface

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| B | E | K | U | +A | +I |  |  |  |  |

Lexical

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| M | E | ^ | B | E | K | U | # |  |  |

Intermediate

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| M | E | M | B | E | K | U |  |  |  |

Surface

**ME Insertion**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| L | I | H | A | T | +V | +T |  |  |  |

Lexical

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| M | E | ^ | L | I | H | A | T | # |  |

Intermediate

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| M | E | L | I | H | A | T |  |  |  |

Surface

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| M | A | K | I | +V | +T |  |  |

Lexical

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| M | E | ^ | M | A | K | I | # |

Intermediate

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| M | E | M | A | K | I |  |  |

Surface

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| R | A | M | P | O | K | +N | +T |  |  |

Lexical

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| M | E | ^ | R | A | M | P | O | K | # |

Intermediate

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| M | E | R | A | M | P | O | K |  |  |

Surface

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| N | A | F | K | A | H | +N | +T |  |  |  |  |

Lexical

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| M | E | ^ | N | A | F | K | A | H | ^ | I | # |

Intermediate

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| M | E | N | A | F | K | A | H | I |  |  |  |

Surface

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| W | A | D | A | H | +N | +T |  |  |

Lexical

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| M | E | ^ | W | A | D | A | H | # |

Intermediate

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| M | E | W | A | D | A | H |  |  |

Surface

**Penanggung Jawab**

Afgani (pita-pita penjelasan morphotactic dan orthographic, penjelasan morphotactic)

Kevin (pembuatan daftar lexicon, pembuatan fail .foma dan .lexc dan gambar fst, orthographic rule pada foma)

Tito (tabel penjelasan orthographic rule, penjelasan orthographic)

Niluh (penjelasan lexicon, tambahan penjelasan orthographic dan morphotactic)