

Program Output:

GRAMMAR is -

$E \rightarrow T + T \mid T$

$T \rightarrow T * F \mid F$

$F \rightarrow i$

Input string is:  $i*i+i$

| Stack   | Input     | Action                          |
|---------|-----------|---------------------------------|
| \$      | $i*i+i\$$ | SHIFT                           |
| $\$i$   | $*i+i\$$  | REDUCE TO $F \rightarrow i$     |
| $\$F$   | $*i+i\$$  | REDUCE TO $T \rightarrow F$     |
| $\$T$   | $*i+i\$$  | SHIFT                           |
| $\$T*$  | $i+i\$$   | SHIFT                           |
| $\$T*i$ | $+i\$$    | REDUCE TO $F \rightarrow i$     |
| $\$T*F$ | $+i\$$    | REDUCE TO $T \rightarrow T * F$ |
| $\$T$   | $+i\$$    | SHIFT                           |
| $\$T+$  | $i\$$     | SHIFT                           |
| $\$T+i$ | $\$$      | REDUCE TO $F \rightarrow i$     |
| $\$T+F$ | $\$$      | REDUCE TO $T \rightarrow F$     |
| $\$T+T$ | $\$$      | REDUCE TO $E \rightarrow T + T$ |
| $\$E$   | $\$$      | Accept                          |