Example

$$a^i b^j c^k \mid i + j = k \quad i, j, u \geq 1$$

so,

$\underline{a}a\ bbb\ cccccc$

$\cancel{e}$

$x a Y \cancel{\cancel{b}} \cancel{\cancel{b}} Z \cancel{Z} \cancel{Z}$

for every a
replace a by x

for every b
replace b by Y
re next e by Z
end for

for every Y
replace y by b
end for

end for

for every a replace it will X
then skip the next a.

for a replace every with
Y & for that b replace the next
c by Z. then and move to
left and repn the new b entry
on n e by Z.

① Replace the Left most a by x & move to Right then. if we on the next input is a skip it. else if it is b replace it we Y. if the next synt is b skip unit we get next n e then replace it with z of that b.

② Again move to Left if we get Y skip it & move to Right to find b it is b then replace it with Y & move Right to find next e and repla it with b.

———

⊔   ⊔

the left   o, and repla it with X. go to Left ⊔ and move to Right to find 1

~~Su fat skip then x then~~ then Replace the 1 with Y. again move to Left then ʌ fut again to move from Left to Right to find

Qus. $T = \{ a^i b^j \otimes^k \mid i \times j$

$L = \underline{a} a b bb ccc ccc$

$= X\ a Y\ bb\ Z cccc$

$= X\ a YY b\ ZZc ccc$

$= X\ a YYY\ ZZZ cce$

$= X\ a YY b\ ZZZ cce$

$= X\ a\ YY b\ ZZZ cce$

$X X\ Y YY\ ZZZ ZZZ$

For every a

    replace a by X

    for every b

        replace b by Y

        replace next c by Z

    end for

    for every Y

        replace Y by b

    end for

end for

Discription

$\underline{a}$ a b b b c c c c e

$\underline{\mathbf{x}}$ a b b b c c c c c c

x a $\underline{Y}$ b b $\underline{Z}$ c c c c c

① Replce the Left most a by X and move to Right. if the next input in a then skip elle it in b then replace it with Y & move to Right serch for the next c & skip other b if any, then replace the next e by Z.

② Agian move to Lift. if the symbol is x skip it & move to Right search for next b & skip other input replace the b with Y & serch for the next e replece it with Z. conry it procee unit all b one replce with Y & its next replce with Z.

③ → Move to Left and serch of y

Replace the Y with b and move to left replace the Y with b move left to left replace unit we reach at input / symbol @ Leftmost symbol X.

(iv) Move to Right Replace the next a with x and follow step i, ii, iii until X * Y = Z. Then accept it.

(V) other wise Reject it.

For every 0

   Replace the 0 from left by x
   Replace the 1 from left by Y

end fun.

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