1. Consider the following 3 languages,

LL = {a, b, c }, D = {0, 1, 2, 3, 4, 5}, B = (0,1)

a) Write down 2 strings from each Alphabet

b) Mention 1, Suffix, 1 Prefix, 1 subsequence and 1 Substring for the strings. Find the length of each of these strings.

c) find the set that will have alphabets from D2.L

1. Let P be the following program. Write a computation of P (snapshots and successors) beginning with the snapshot (1, ), where consists of the equation X = 3, Y = 3, Z = 2

| [A] IF X≠0 GOTO B  Z ← Z + 1  IF Z≠0 GOTO E  [B] X ← X – 1  Y ← Y + 1  Z ← Z + 1  IF Z≠0 GOTO A |
| --- |

1. Let Without using Macros,

write a program in P that Computes .

1. Find the Godel number of the following program

[A4] IF X2≠0 GOTO B2

Z3 ← Z3 + 1

IF Z3≠0 GOTO E

[B2] X2 ← X2 – 1

Y ← Y + 1

Z3 ← Z3 + 1

IF Z3≠0 GOTO A4

1. If  **= { a, e, i, o, u, p, q, r, s, t } ;**

What are the Godel numbers of the following strings

* 1. priest b. quiet

1. If  **= { a, b, c, d, e, f, 7, 8, 9 } ;**

What strings are associated with the following Godel numbers?

1. 417 b. 350

7. Using Post-Turing program rules and using

Alphabet A = { write a program which

Consider an input ‘’, which outputs s3s2s1s3s1s1s2

Initial tape configuration is B

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