```
of white a eprogram to Edentity the FIRST and follow of
 every variable of the guen grammar. The program
              rumber of productions in the given
  grammal and laker takes the productions
                                    16,015,015 Hyped
 # include Lb/bs/ stdcH.h)
 void FIRST (chark, char);
 void add To Array (chan to, chan );
  void pointhosay (chan *); (such: tourse of role) This biou
                                 dos subsessult [es];
 int n;
 char production [20] (es];
                                  int found Epshon;
  main ()
     int i, j=0, K, found Nt = 0; (0) = (0) there
     char c, result [20], n+[20];
     cout 22 "Enter no. of producting: "2'
     conssny
    for (1=0; idns 14)
        cout < "Enter production number ded;", (+1);
        cin>> production (1) (1)
        add to Array (nt, production [:3[0]?)
                      of (graduation (1)[2]
    for (k=0; (nt[k])=(10'; kH)
       c = nt (k];
       FIRST (Gresult, c);
    "cout ex "FIRET (1.c) = { ", c);
        pront Array (nesult);
        print f (") in ") in loga house
       getcher ();
```

```
for (K=0; nt(K) (=101; kt) (AR21110011194
for Ca-

for
margarac = nt CK];
                                           point & C"In follow (Mec) = (", c);
                                             pront Array (result); and some some
                                           postf ("31n"?,
                                                                                                                                                                                   " ( seal of tensory ( chase to select );
    voted FIRST (chan # gresult; chan c) (*
                                                                                                                                                                                   well fallow (even #gusult, who
          2 mt (); k;
                                chan subresult [en];
                                    int found Epsilon;
                                    subhesult [0] = 1,01;
                                      Result [0] = "(0);
                                                                                                                                                                 = 0 K found Nt = B
                                                                                                                                                                       a moralt [203, 1+ [203;
                                    it (1(18 upper (c)))
                                                            add To Array (Result, C);
                                           3
                                            elle
                                            for (1=0; ikn; itt) of toulog point is two of it (10) if (10) if the color of it is the color of its indicate of its ind
                                                                                                                     if (production (17/2) == ini)
                                                                                                                                                   add to Array (Result, "in"); 0 = x)
                                                                                                             elle
                                                                                                                                                                  found opplion = 0; (1) Atomo
                                                                                                                                                                                                                                                                                         getchar ();
```

```
FIRST CSUBResult, production (13());
        for (k=0; subresult Ch] = 10°; kH)
               of (subpesult (K) == : n)
                     found Epsilon =1;
               de
                  add To Array (Result, sub Result [k]);
          if (! found &p splon) (0/) = [0] there a due
          PIRST (Jub Result, production [1][K]);
                  took (t=0) subpecult [t] != '0';
                      (" ( ) == ( +) tlussedduz) 79
voted follow (chan & result, chan a grown
     mt il, i, k, t, found Epsilon = 0,
     star [ intrepult [20];
     Pt (c = = production [a][a])
        oold To Array (nesult, '4');
for (1'=0; izn; ith) (not in brust )) 7.
        2 int l= Holen (production (+3);
          far ( g=2; g<1; g++)
               found Epsilon = 0;
               if (production [1][] ==c)
               £ # (j==l-1)
                 follow coresult, produce tron (:300);
                    If (1 18 upper (production (136) H3))
```

```
add to Livery Crusult, production (17 6)
                            for (k = 0) subpends (
                  th ( gublesult ( K ) == ( A )
                    tong spriles :1:
else
  for CK = j+ 1; KX light port Ast boo
    1
        sub Result [0] = (10); (10) & brust 1) 4.
       found Epsilon = 0;
        FIRST (sub Result, production [i][k]);
        For (t=0; subresult [t] = '0', t++)
           if (subresult (+) == (n')
                found Epsilon = 11 was to rest ) would
                        1. P. K. E. found Epiton
              odd to Amay Cresult, subfesult [+]);
      if (I found Ensilon)
   of (found Episton)
E parow (runt (production [:3[0]);
 39999
 # [ [ Peupper ( Gradus 4, en C. 21. 3. 4. 3. ))
```

Input:
3
3>03a
5>636
5>636

autput: [AP21110011194]
FIRST(S)={a,b,e}
Follow(S)={1,a,b}