11.)

→ suppose two nodes starts to transmit at the same time a packet of length L over a broadcast channel of rate R

→ The propagation delay b/w the two node as d_{prop}

→ If Transfer noded at some time, then receive the bits of packet from another node while $d_{prop} < L/R$

∴ The collision is occured

5.) C's adapter will process the framers, but the adapter will not pass the datagrom up the protocal stack. If the LAN Broadcast address is used, the C's adapter will both process the frame and pass the datagram up the protocal stack

①

procedure
deklaration that associate an identifier with a statement

Activation free
Root main
function are children

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sub division   of Runtime memory

compile time ——→ code
                  ↘ static Data   ——→ memory location for code

Runtime   ——→ stack
                  ↓

             free memory

                  ↑
             Heap -   ex. malloc

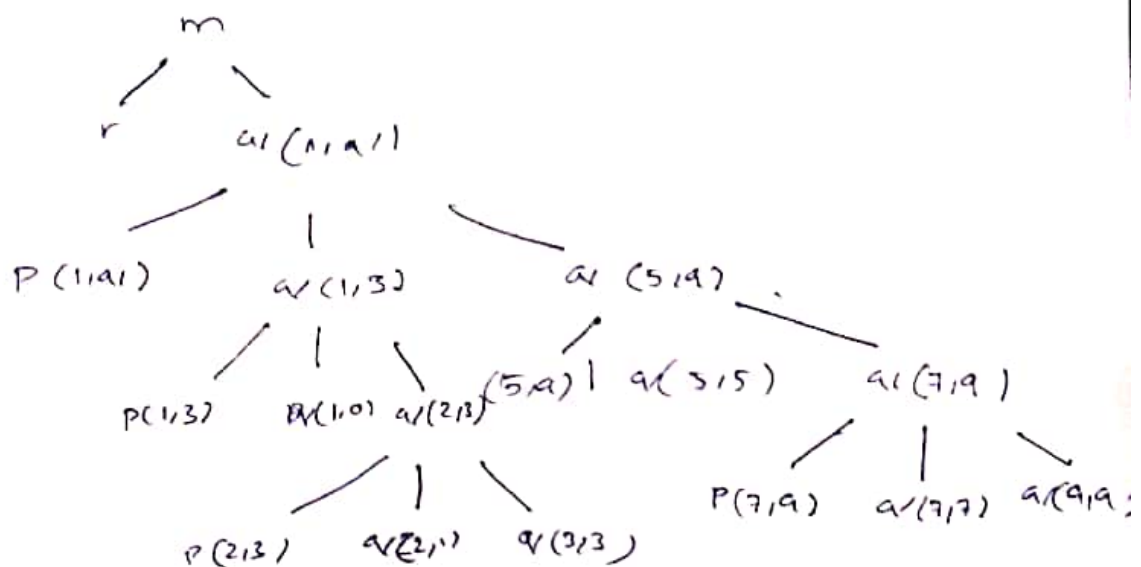Inter main ()

    enter read array ()
    leave read array ()
    enter q/sort (1,a)
       enter part (1A)
       leave part (1,a)
    leave q/sort (1,a)
    leave main ()

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Example - quick sort   Activation free

Ly helps us to know which all

function are active

and also the control flow

```
void output (int n, int x){
      print ("the value of %d! is %d [n n,
}
int fal (int n){
   int x;
   if (n>1)
      x = n' fat (n-1);
   else
      x = 1;
   output (n,x);
   return x;
}
void main (){
     fal (4);
}
```
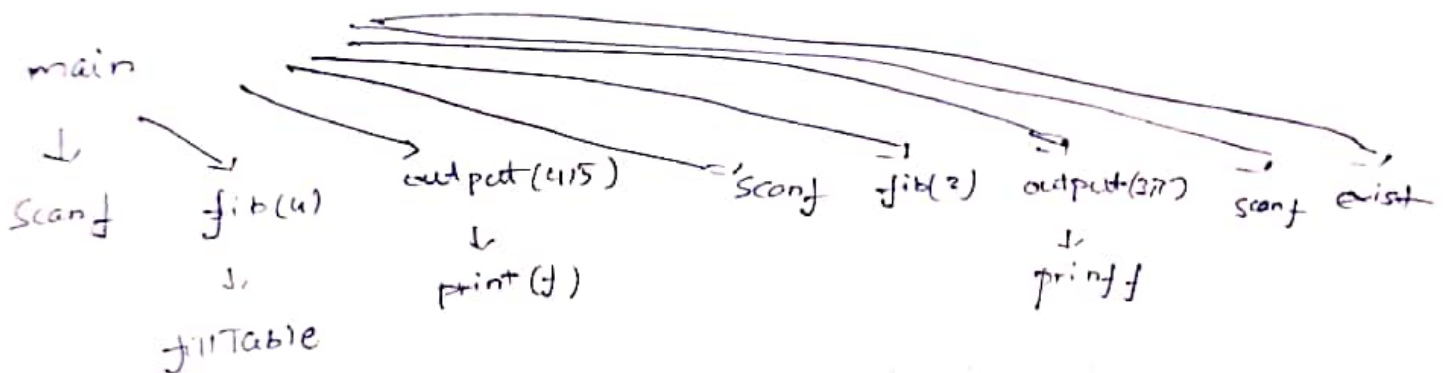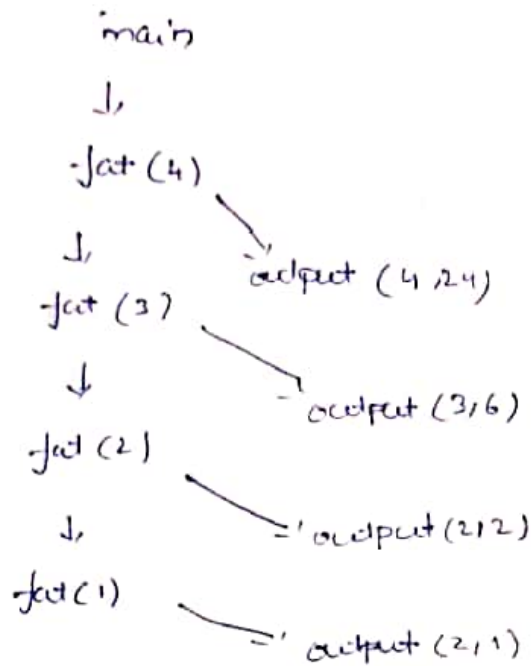
← fig tree

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③ Activation

tree

fat (4)

```
                        main
                         ↓
                       fat (4)
                         ↓           ↘
                       fat (3)       output (4,24)
                         ↓
                                ↘ output (3,6)
                       fat (2)
                         ↓
                                = output (2,2)
                       fat(1)
                                = output (2,1)
```

```
main
 ↓
Scanf        fib(4)        output (4,5)      = Scanf   fib(2)   output(2,7)   scanf  exist
              ↓              ↓                                     ↓
           fillTable      print(d)                              printf
```

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4) control stack

→ keep the track of line procedure activation

→ flow of control is programe corresponds to
first traversal of Act. tree   DF depth

push — activation begins.

pop — when act. ends

Activation record

control link – pointer
that point to
actionvation record of caller

access link —point to non
local data
(magu is dteract
return)

SMS — holds imp about machine

local data
temporaries — temporay value used in
.evaluation

Actual Brometers
return value
control link
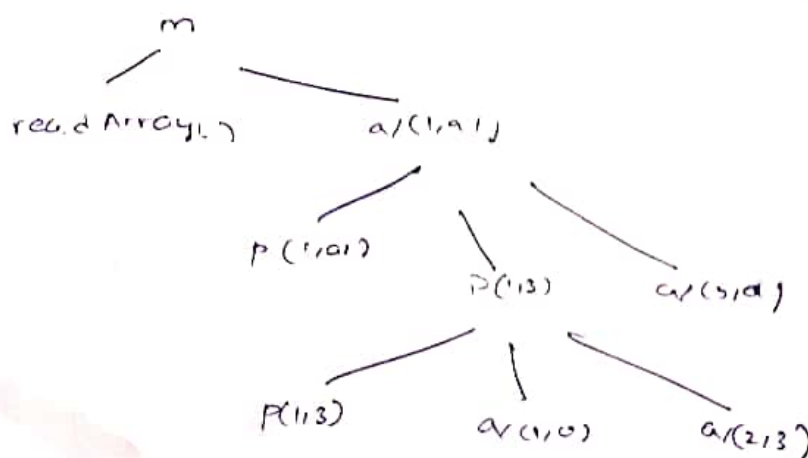Access link
Saved Machine State
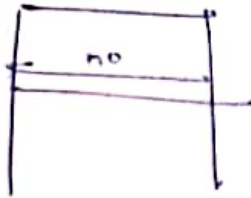Local data
Temporaiis

returned
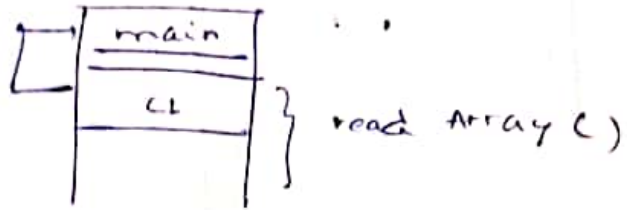value – value
to be
returned

5.) Activation Record - Egl orcuicksont
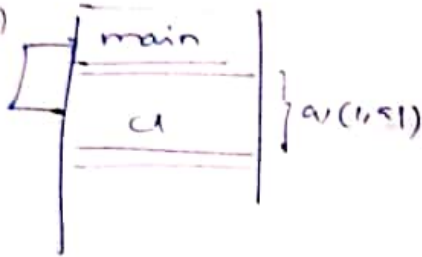
[T. Raqme
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at m

no

at read Array ()

main

CL

} read Array ()

Cat al (1,a)

main

cl

} a/(1,51)

at P(1,4)

main

cl

} a/(1,4)

cl

} P(1,4)

6-) at a/(1,3)

main

cl

} a/(1,4)

cl

} (a/(1,3)

at p(1,3)

main

cl

} a/(1,6)

cl

(a/(1,3)

cl

a/(1,7)

at a/(1,0)

main

cl

} a/(1,4)

cl

} a/(1,1)

cl

} x(1,0)

[7]

Activation Record Eg2

main

n=4
ret value
CL
saved status
x   } fact(4)
n=3
ret value
cl   } fact(3)
saved status
x
n=2
ret value
cl   } fact(2)
saved status
x
n=1
ret value   } fact(1)
CL
saved status
Y
n=1
x=1   } output(1)
CL
Saved status

sp →

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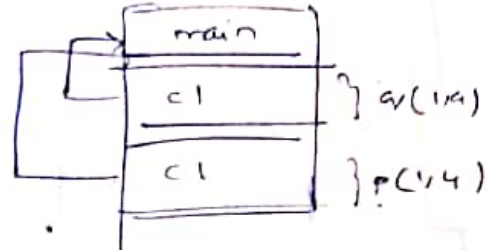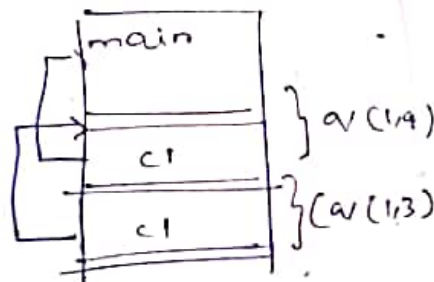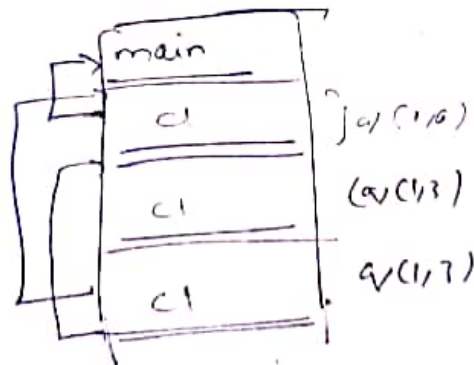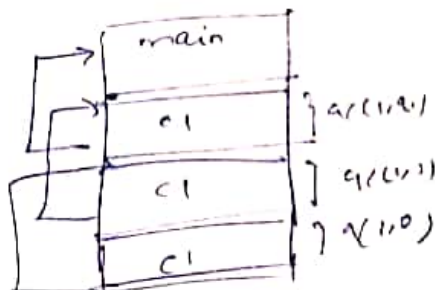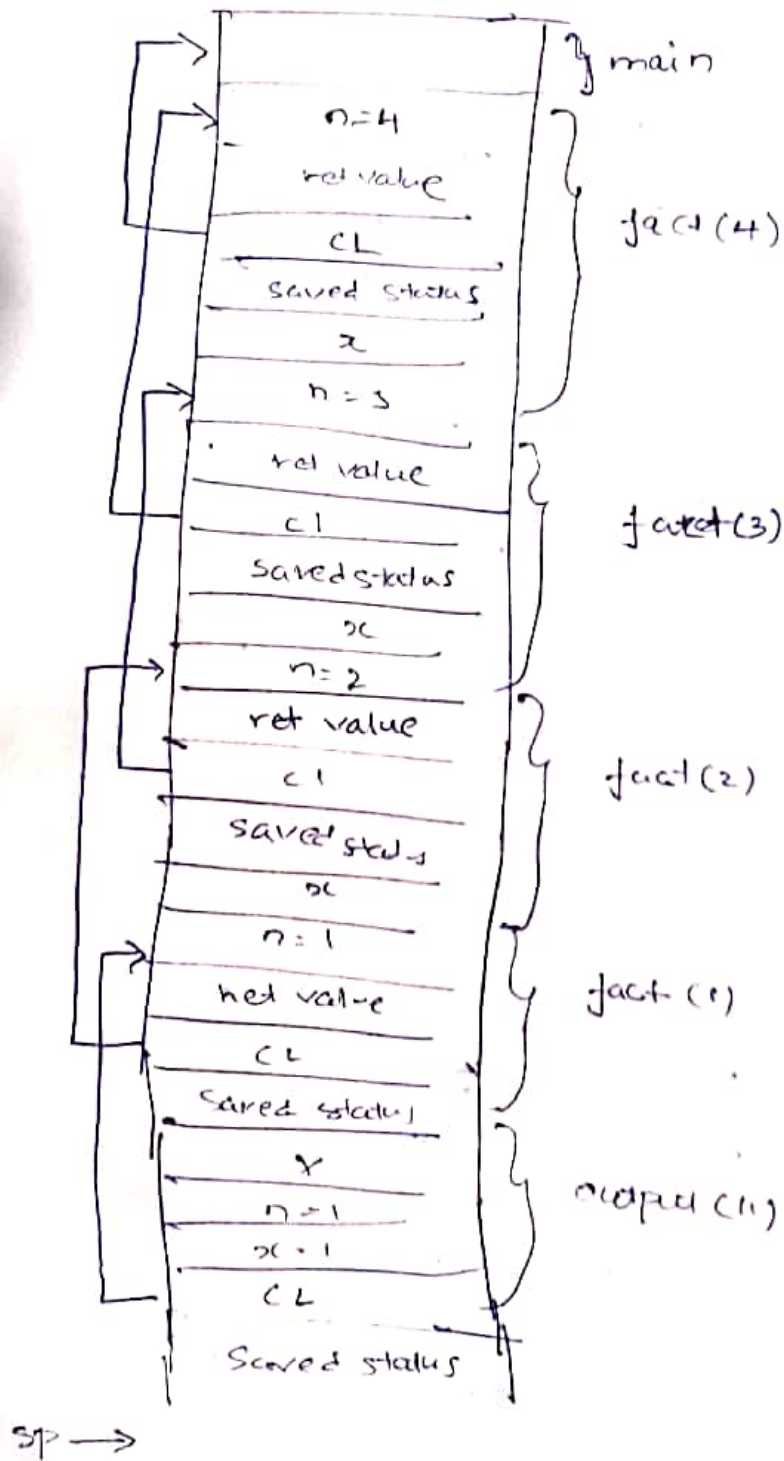
→ P(x) = $x^3 + x^2 + 10^5$ (1101)

G(x) = $x^6 + x^3 + x^2$ (1001100)

Multiply by the number of bits in the (RC polynomial

$$x^3 (x^6 + x^3 + x^2)$$

$x^9 + x^6 + x^5$ (1001100000

```
              1 1 1 1 0 1
      1101  | 1 0 0 1 1 0 0 0 0 0
              1 1 0 1
              ─────────
                1 0 0 1
                1 1 0 1
              ─────────
                  1 0 0 0
                  1 1 0 1
              ─────────
                  1 0 1 0
                  1 1 0 1
              ─────────
                    1 1 1 0
                    1 1 0 1
              ─────────
                      1 1 0 0
                      1 1 0 1
              ─────────
                        0 0 1
```

we the divide and determine the remainder the

result is "001" so the transmitted why is

1001100001