Q1: i).

main( )

conv(12,2)

conv(6, 2)   print(0)

Conv(3,2)   Print(0)

Conv(1,2)   print(1)

Print(1)

————————————————→ 1100

ii) Print Digits: PD for Print Digit( )

main( )

PD(3125)

PD(312)   print(5)

PD(31)   print(2)

PD(3)   Print(1)

Print(3)

————————————————→ 3
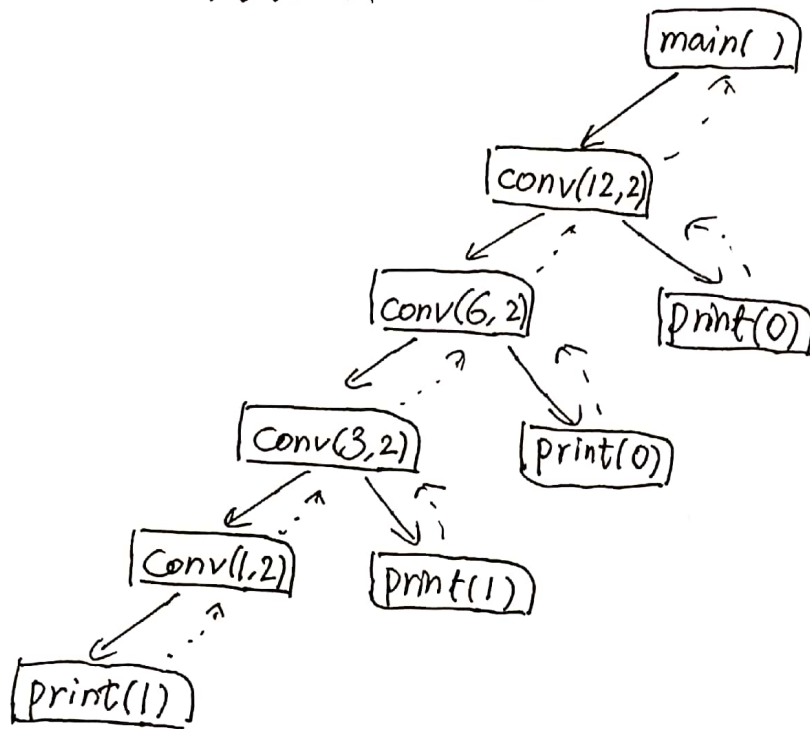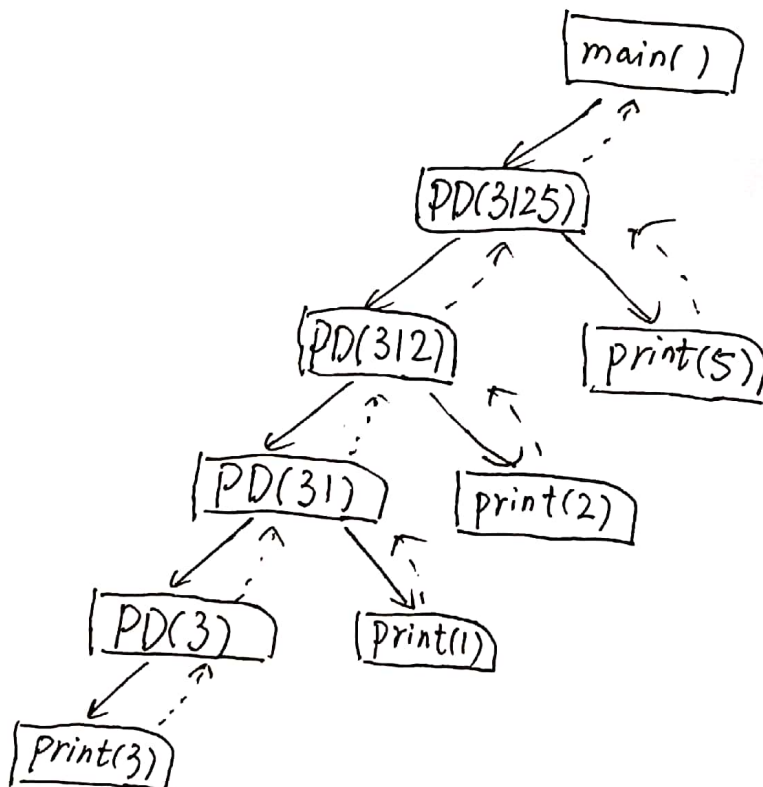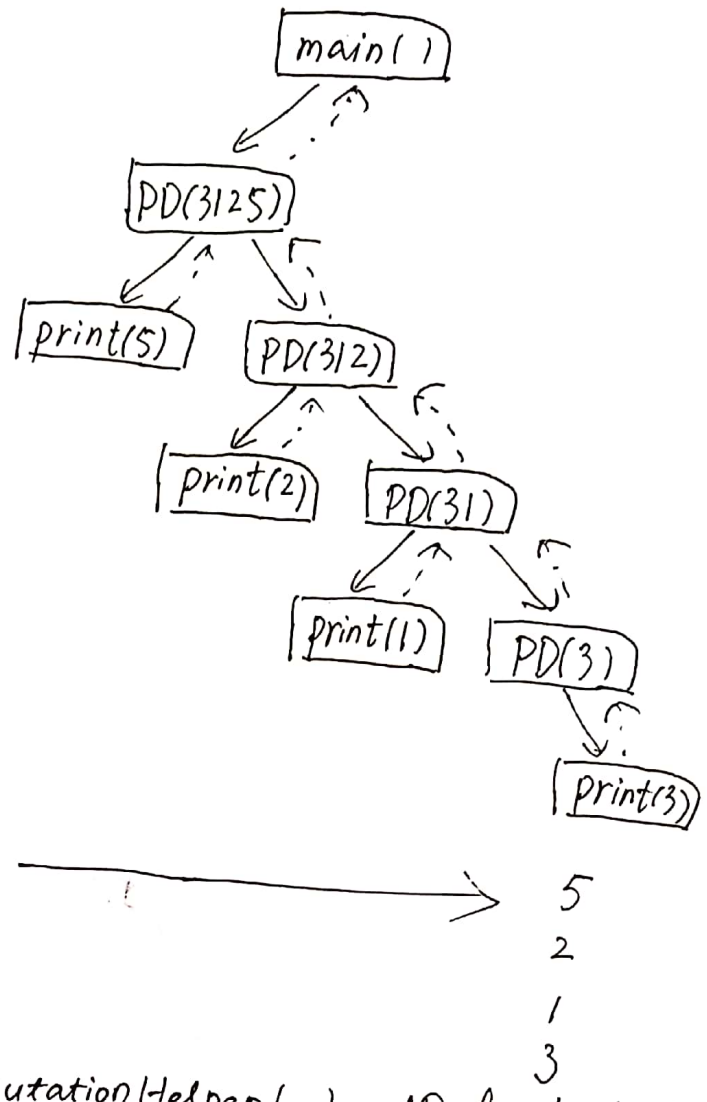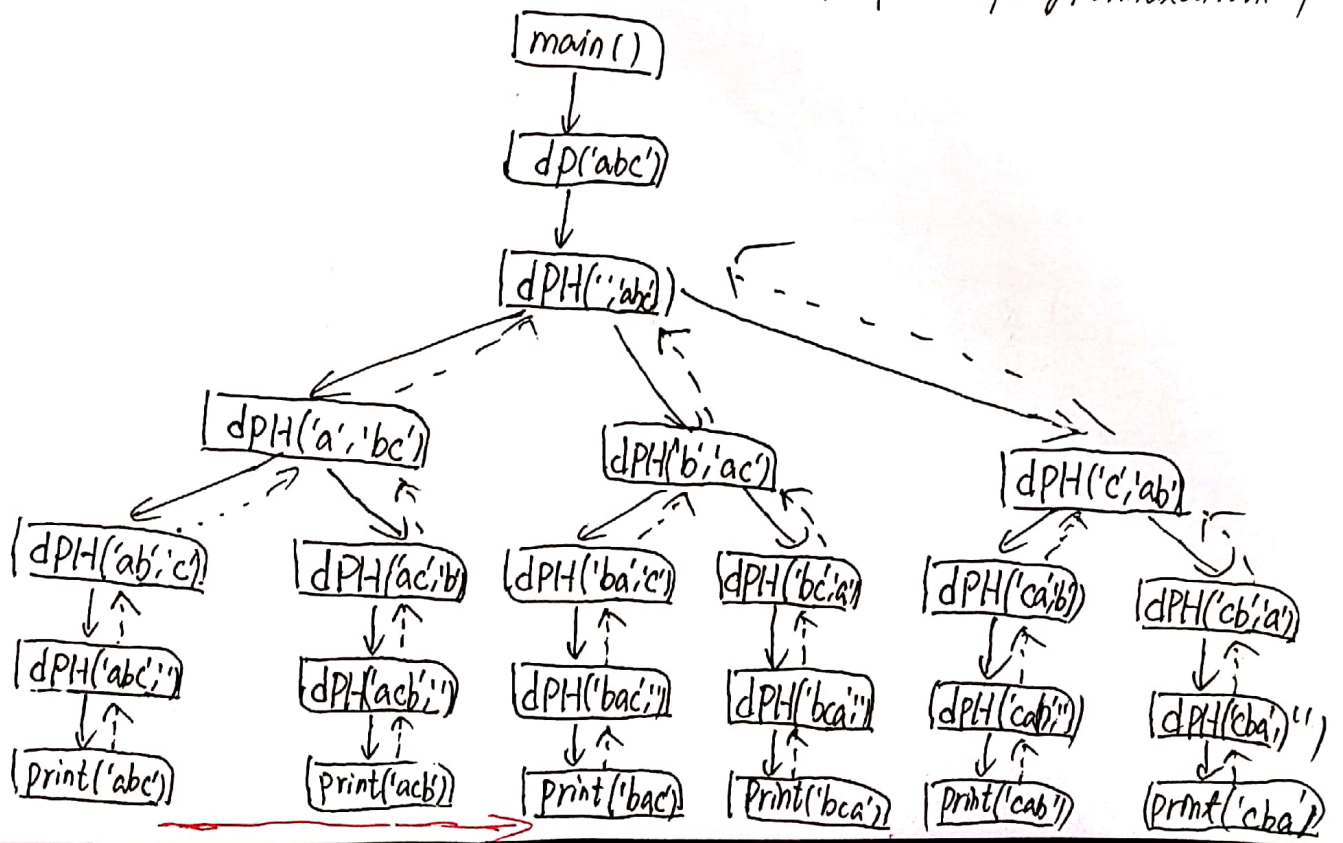   1
                                        2
                                        5

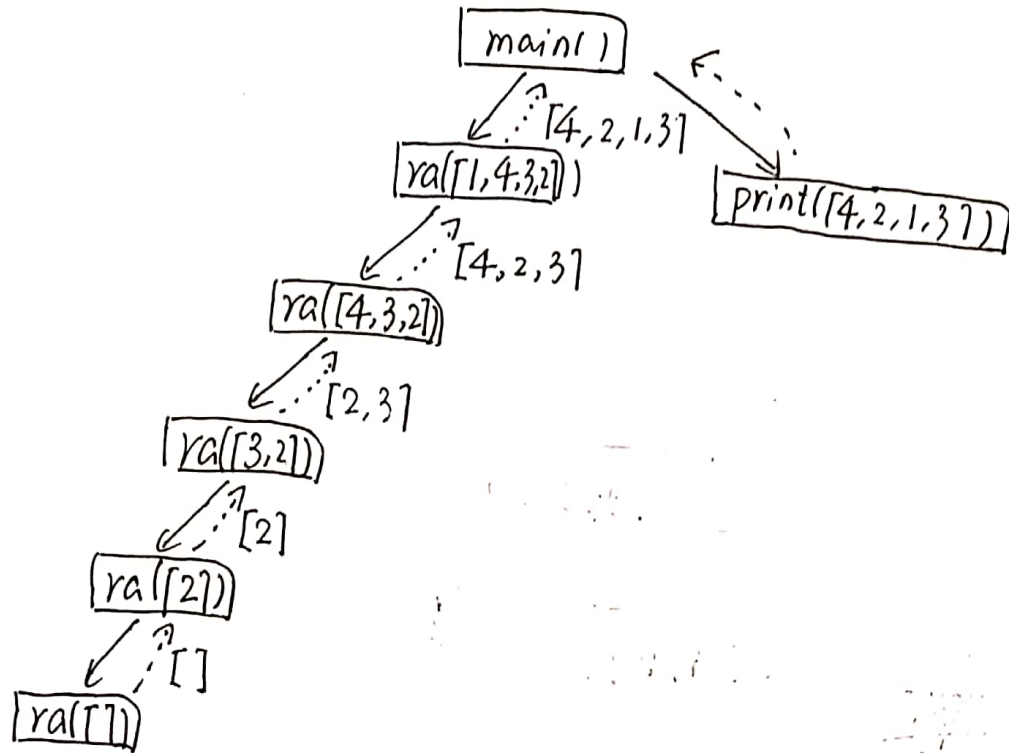(ii) Print Digits in reverse order.   PD for Print-Digit( )

```
                              main( )
                                │↑
                                ↓ ⌐
                            PD(3125)
                           ↙  ↑    ↓⌐
                    print(5)    PD(312)
                               ↙  ↑   ↓⌐
                        print(2)   PD(31)
                                  ↙  ↑   ↓⌐
                           print(1)    PD(3)
                                         ↓⌐
                                      print(3)
```

———————————————→   5
                   2
                   1
                   3

Q2: dPH for display-PermutationHelper( ), dP for display-Permutation( )

```
                         main( )
                            ↓
                        dP('abc')
                            ↓
                        dPH('','abc')
           ↙              ↑    ↓    ⌐_____↘
     dPH('a','bc')    dPH('b','ac')              dPH('c','ab')
      ↙      ↘         ↙       ↘                  ↙        ↘
dPH('ab','c') dPH('ac','b') dPH('ba','c') dPH('bc','a') dPH('ca','b') dPH('cb','a')
  ↓↑          ↓↑          ↓↑          ↓↑          ↓↑          ↓↑
dPH('abc','') dPH('acb','') dPH('bac','') dPH('bca','') dPH('cab','') dPH('cba','')
  ↓↑          ↓↑          ↓↑          ↓↑          ↓↑          ↓↑
print('abc') print('acb') print('bac') print('bca') print('cab') print('cba')
```

Q4: ra for rearrange() :

main()

ra([1,4,3,2]) .... [4,2,1,3]

print([4,2,1,3])

ra([4,3,2]) .... [4,2,3]

ra([3,2]) .... [2,3]

ra([2]) .... [2]

ra([]) .... []

Q5: fS for findSubset( ):