2530 - binast. (6) 1000 cm 350.00 p30 2 | 8530 4265 2132 10000101010010 -> 0) + dp: 9 1066 JO) HAPIS 533 -1 1 1 Apia 266 -)0 - 51 20 C EI M EDI 133 66 35.87 prania (2 33 16 8 -> 0 + + 31 OF 2 VBm (- 5 ->0 11101 avil T9 000 81 , F 008° +Apir 6) 1010101010100101110 (1,3,5) 1 1 1 1 1 1 1 1 1 0 1 0 1 0 0 1 0 1 1 18,10,12)1 1 1 1 1 1 1 1 1 1 1 1 0 1 0 1 1 113, 15, 19) n no, of moves = 3

```
sequence
             -) ROOT (0)
               Right (1)
                                3961
                164+ (0)
10000010100001
                               1810
                 Right (1)
                 Right (T)
                 Right (1)
            15
      1-1 as
  5) Binary tree
    ( -) more to right.
    o is more to lett.
     given,
              10111
                   13 00+ (R)
     800+,
     right
 011112140010101010101
               11 12 1 1 1 (2,4.19
```

10,0183

2: 9 8 137/811/1 01 15 movin (r 1100 -12. 1101 -13 1101 -13 1110 - 14. 1011 -11 1010-10 10001-6000 +000 ton 01110017 0 1 601 60 24 to 1: 0101-5 0 - (0010 -2 0011 - 3 ood 1 — like s first divide into two parts and weigh using the digital balance at keepon doing it till left with the heaviest weight. (- not conton don + 524 lie (6 (8) sem = (8em +2, + current bit) mod 7. First rem =0 110110 -For st bit rem = (0x2+1) mod 7=1. (1×2+1) mod 7=3 3rd rem = (3x2+0) mod 7=6 4th rem = (6x2 +1) mod 7 = 13 mod 7=6 5th rem = (6 x 2+0) mod 7=12 mod 7=5 8th rem = (5x2+1) med 7=11 mod 7=4 7th dem = (4x2 40) mod 7 = 8 mod 7 = 1 Final rem =1 .. Final remis not equal to 0 the binary number is not divisible by 7

7) Given -) 1011 0/111 01 is not Palin drome because reversed is number. not equal to oxiginal 1208) if we flip. 410) to o we get 5(1) +0 1 - 1000 -09 90V 100 300000 -) 1100110001101 winned sat which that life . In place 9) Highest XOR Values for-) -> without having more than 3 consecutive is -) ollo11, 100110 1= 1 bom (1+ 1x0) = max ha 8= 1 50m (1+1×1) Derborn (onexE) 1 -1 hom El = 1 hom (1+ ex) · Cuty cochen sicrbon (onex) Harbon Harbon (1+ 1×2) erborn 8: " ham (on 1x") consid but to of caugo for it most would The tot sidisivib ton a redomin