Rasic UNIT-2 Based on scenario une home to choose appropriale plot. UNIT-3 Princhons: User defined clothe New rop left save as .m.
publion name and he same as the name

Crething mont: Use [mont()] eg: mont ("enter:") > if chemorsh mput mput ("Fatersh:", (31) > if formput ("Enter number:") given 1/p as 'k' then it shows orror since give any 's' in mput(). > " f t = 11 is miralized there the number it won't show error since 11 is assigned to t Output shorts: =) [disp() & fprintf() fpront () =) negunes formal speafers

disp() => display as it is no need for format perfects eg: disp(6²) eg: fpmif ('The value is 1.d', 4 13) Of the value is 64

: (Meger- yed, floats of, charance format specifiers Shry 45

vector in formy: vec = 2:5 fprintf (1 rid In; vec)

Sample Question fractions

- > Factorial of a Cilven No
- > Prhonocci Series
- > Prime numbers
- 1) > Ask date from the user give the day Criven (Then case! Start of month eg. Thursday (Then case!
 - 1) there valid F/p by logical AND date <= 31.
 - e) Entered date > 7. take modulo else enter the switch case -> case 1: Thu 4: sun 0: wed

2: Firid 3: Mon

3: sat 6: The

Code :

date = input (" Enter the date no: "); if (date >=182 date <=3))

h = mod (date, 7);

Switch n 1. Moth the start day is Monday Y.

Coire 1

disp (! Monday !)

coure 2

disp ('Tuesday')

Case 3

disp ('wed')

case 4

disp (1. Thu!)

case 5

disp (Pri)

case 6

olisp ('Sat')

case o

alop('Bun')

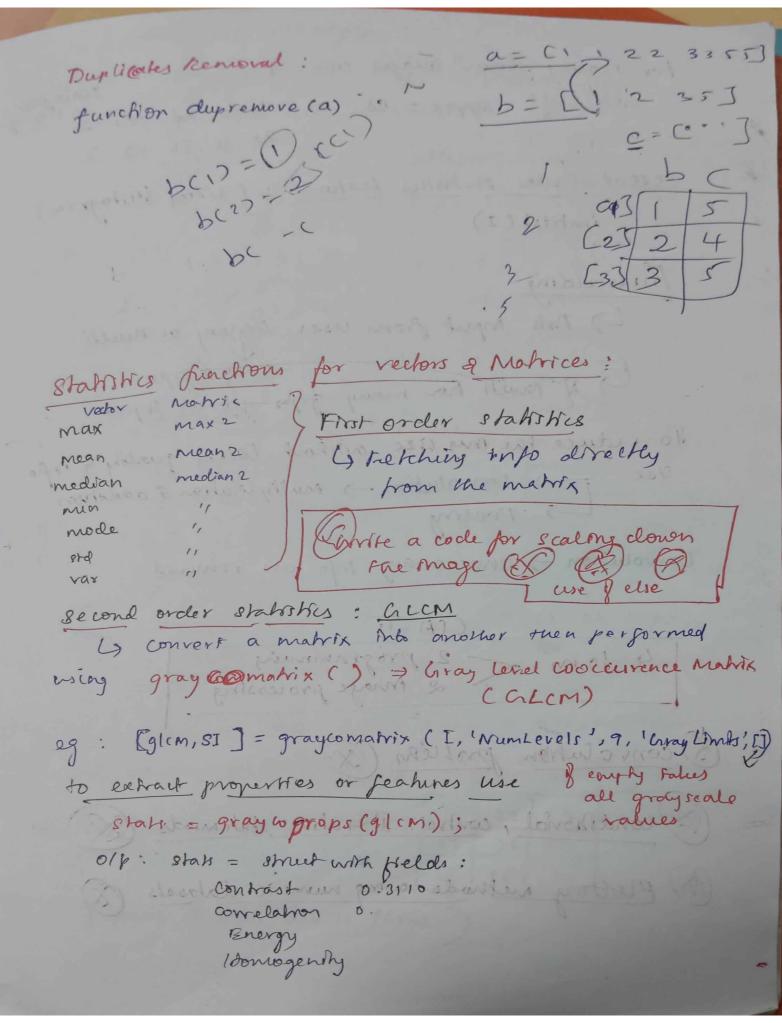
Otherwise

disp ('invalid')

end

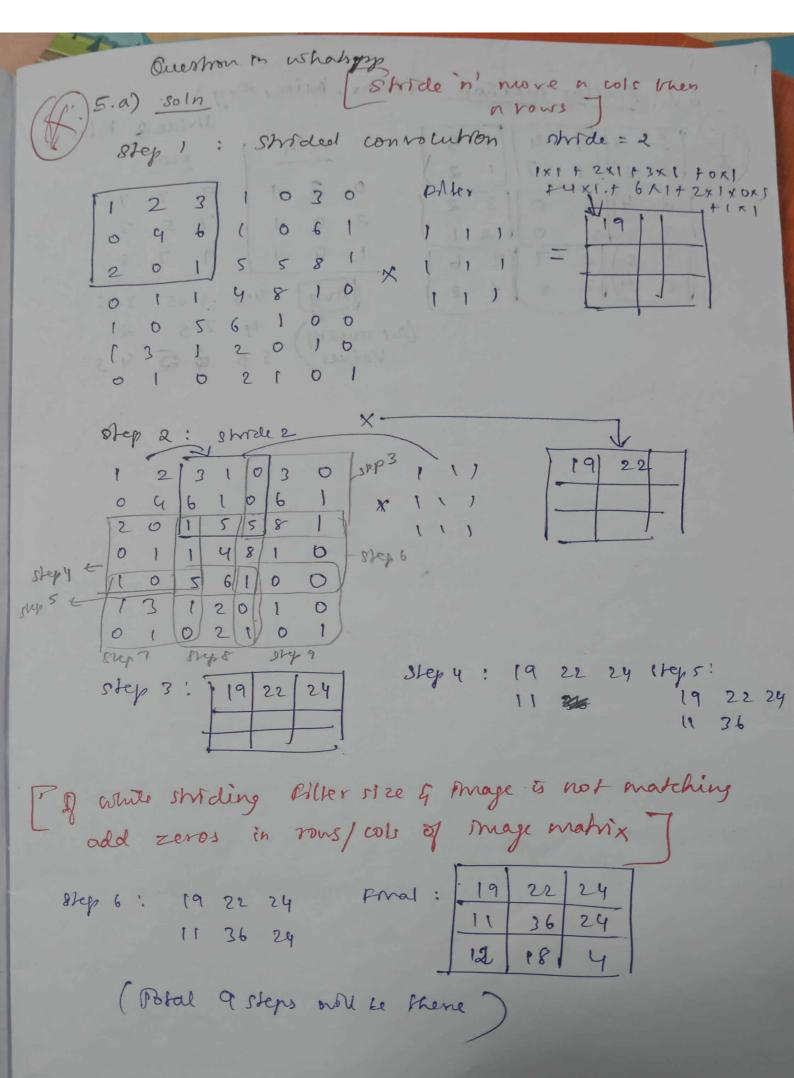
```
Demonstrate Brothmette operator using swinch case
    a = input ( Meater a value: ")
    b = Mput ( * enter L value : 1)
     op = Input ( "enter the arith growntor ", 's')
                                        Swhile op
     switch op
                                         cone "sus"
        case (+)
                                         displa-6)
          clip (a+6)
                             For
                                         case "add"
        case (-)
                             str &
                                         dos, (a+6)
          dnp (9-6)
                              rigus!
         8 mise
                                        o transite
          disp ('shralid')
                                        drsp ("Drivaled")
                  > Duplicates removal > Frequency count
     CIA-I
                      Junihons & Masgre (6)
                 > Sorting -> Bubblesort
7 plocony
                   searching - Linear, Brang
7 GUE
> Broken solving -> sorting, Mahre S/p, nested log, function
  roots of a quadratic egn
 function based on no. of args & return values]
  function [x1, x2] = quadratice (a, b, c)
    global d;
                      " (" bound framedo") fall
    penchon disc
    d=sgrf(b12-4"a"c);
    disc;
   Rr = (-b+d)/2#a;
                                 + hour = was
   N2 = (-b-d) /2 #a;
    end
```

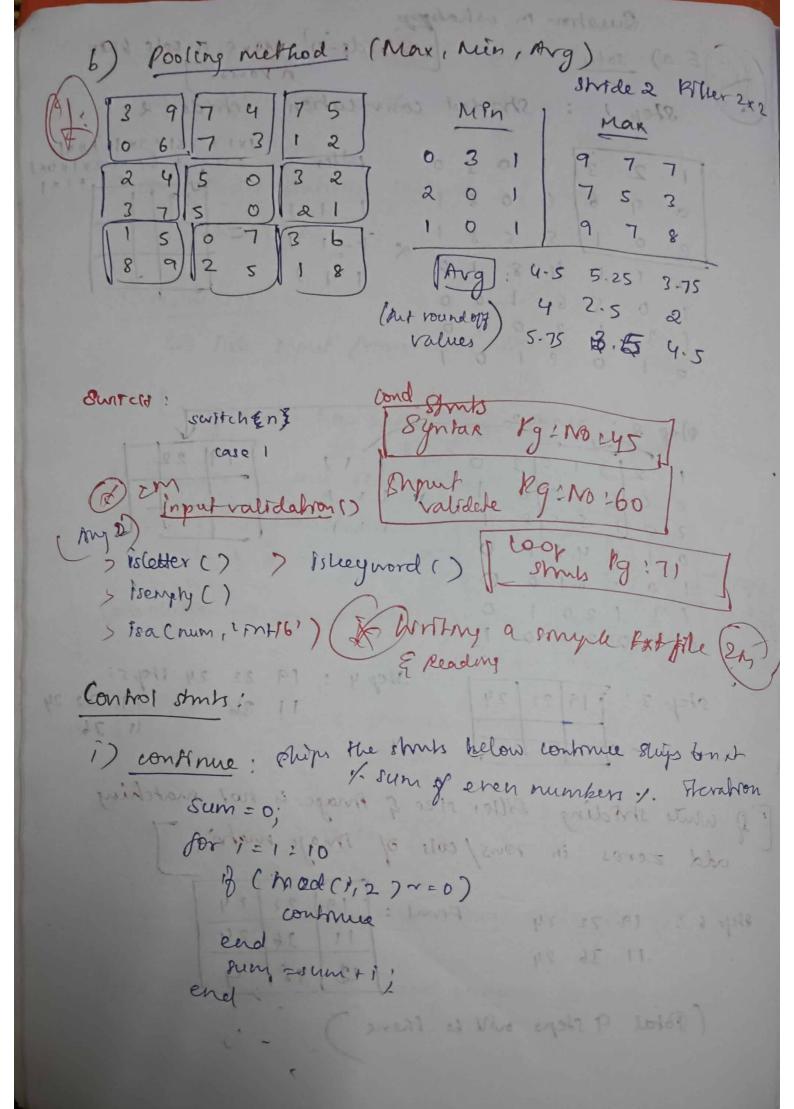
```
to 100 even nos
    Kecurson fune
     function nes = factr (n)
                                     (n==0)
    $ (n==0)
       result = 1;
       result = n + factr(n-1)
                                   eard
   end
                                    of (mod (n,2)~=0) If my
Brany search:
 > need sorted array
 > Find cow (=1), middle, high (length (am))
                       hightlow
 > get a rearch ele as mout
 > Malie 3 comparisons seerch > mid < mid = mid
     function brearch (a, n) a, n)
        10W=1;
        high = length (a); flag = 0;
        bookhile (four = high)
          mid = floor ((hond + htgh)/2);
          if (a(mid) == n)
            disp( "element found");
            flag = 1; break;
         elseif (n < a (mid))
            high = mid - 1
         else
             low = mid + 1
          end
         flag == 0
          disp (" element not found ");
```



Por scaling down mages into 9:

Scaling down mages into 9: Second Order statistics features: (Using Histogram) . imhtst(I) Thresholding () Not mout from user Donary or Mulh' G & Multi how many grys get as mout To reduce the my cree without losing quality & mpo Obe (Convolution) multiplication & adelition Dooring Convolution > unnecessary info are removed CIA-TI 2 programming 2 mage processing B convolution proteen (x) Conditional, control; Derative statements (Moting methods asing numeric datosats (





```
11) break: prematurely terminating the wop
       for 1=1216
          n = mput (" Enter the number: ");
          ig (n < 0)
break
       end end
(B) Pales (D) lon of write detailed fromty or dop
   Read & write nums on files: struts whenever
     date = [[2345678410];
Alename = ! test-tat';
     fid = Meopen (filename, 'w'); \ Crife
     Sprintf ( ptd, ( 1-d \n', data);
     fclose (fid);
   fid = fopen (filename, 'r');
 1.4 methods to read ple
   1. 1. 1. Stoat ? 4. f strong -> 1.5
    91 = fscanf (fd, y.d In);
fclose (fd);

y methods
     42 = textread (filename, 19-d'); to read file
     43 = in portdata (filename); @ 2m or @ 10m
      94 = load (Hlename);
                    A) seems server one. ( )
Debug whether file open (validation) (2) 2m
     Alei - foren ('text-text', 'w');
     if fore ==-1 ( go low in would dold. $900.).
       error ('Farled to open Will');
```

@ Read & Criste table: (8)



Id = [101; 102; 103; 1047; Shape = { (A); (B), (C), 10'3; Price = [10.0; 13.5; 10.5; 0.16]; Shoule = [376; 476; 500; 100];

t = table (&d, shape, Price, should); erritetable (T, 1 tabletat tx + 1); tabledala = readtable ('tabletxt-txt');

Debugging

> Syntax error I types of error

Debugging Process: (10 m 60 2 m sering

i) Preparing for debugging 17) setting breakpoints

M) Running an M-file with breakpoints of combined IV) Sterning through an M-file I explanation

V) Examining values

(Mi) come ilny hoblems vi) Endry debugging

i) Preparing for debugging:

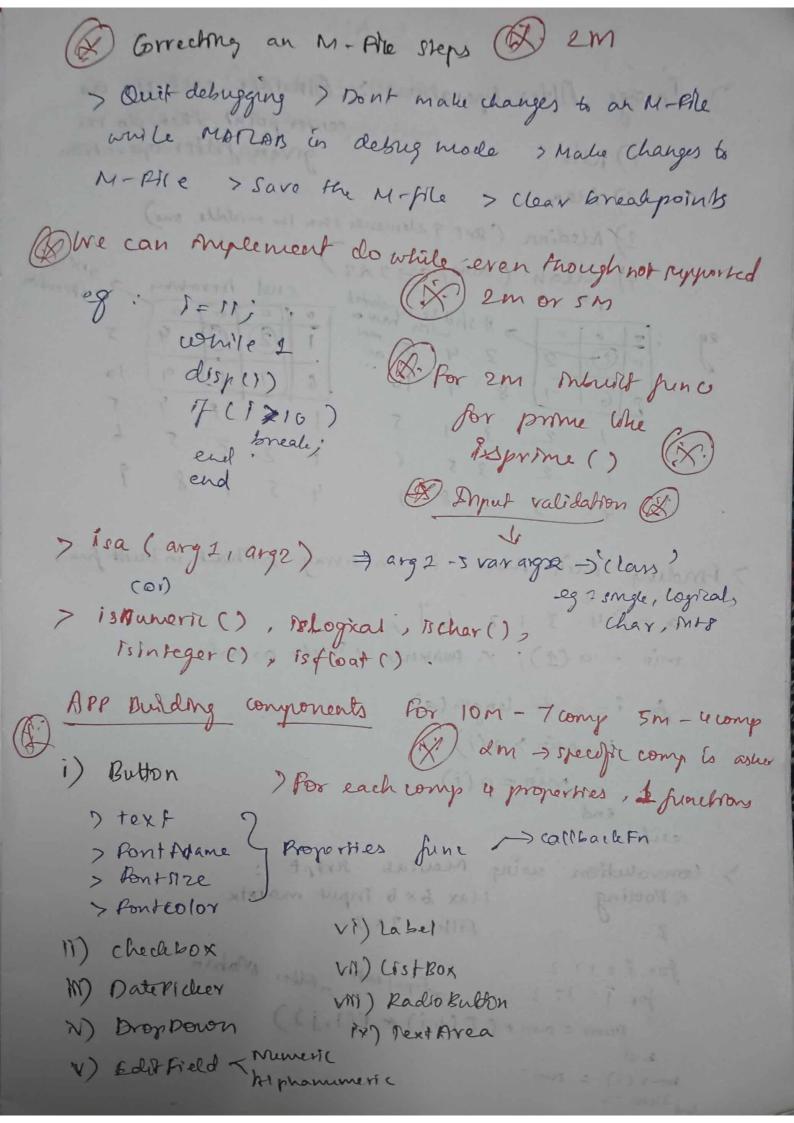
5 open ple 7 save changes > drechorses

N) Selling derealipoints: (2m

8hprés => · Standard · conditional · error breakpoint

My Running and breakpoints:

(USB Step givon in Mattab)



comming on No. Ale 10-10 (28) EM.) Image Alter Operations: Admitter each ele as center point then do the 1) Min given filter operation 2) Max 3) Median (sort 9 elements than the middle one) 4) Mean (suns/9-)x3) Acrahry 2 no 7 4 5 7.89 > Fonding min parer in an army without in built for. $\alpha = \Gamma + 3 + 2 + 6$ j. Logodin. O manufici min = a (1); 1. commune 1 st ele as min for i = 2 to length (a) end min = a (i) > Convolution using Markab surint: a Pooling Max 6x6 Mput matrix Altr 3x3 for i = 123 I sput notice petter Mahria for J= 1:3 sum = sum + (I (1, j) * F(1, j)) conv(i) = sum;

Fles (rud & WMTA)

> Motor vector operations > Matlas App