```
26-7-24
                                                 Abijit S.R
                Program po matrix addition?
     Write a
     sconner input = new beanner (bystern. in);
     int mat [][]= { 1, 2), 45, 3};
     int mat 2 [][]= { {2, 33, 34, 13];
     int mat - Sum [][] = new int [2][2];
     for Cint i = 0; ic len: i++)
       soptem out Print ["Enter Leight: ");
         for (int j'zo; rejectent; jett)
          be ( of iso; ichoght; itth) &
            mat _ Sum [i] [i] = mat |[i] [i] t mat 2 [i] [i];
          System. out. Print (mat sum[i] [i]+"It").
           system. out. Print In ();
                              t: Enter the sample
```

12. Write a Program do Print rectargle symbol Pattern Gret de symbol as input from user

```
impost java vtil. scanner:
Public class. Restargle Potternh
    Public stotic void main (string [ Jargs ) {
       scanner input = new scanner (system in)
       system. out. Print ("Enter the symbol: ");
        char symbol = input. next (). char At (0)
        system. oct. Print (" Enter width: ");
        int width = input - next Int 1);
        system. out. Print ("Enter height: ");
         int height = input next Int ();
         for (int i=o; icheight; i++) }
       my for (intro) = 0; je width: jer)
     System out Prints (symbol + "");
            suptem. out. Println();
           input close () three the motion
      3
Input: Enter the symbol:
                         12. write a Program do
lodar Enter width: 5
          Enten height: 3
                 togni ica ladrige il lind
Output:
```

```
13) Write a Program that would soot a List
   of names in alphabetical order Ascending or
   Descending, choice get from the user?
  ( It I come of sometimes I's well !!
       Ell care = dust hing
  Scanner input = new scanner (system. in);
  storing over [] = 2 "Barara", "Apple", " Cornot", "Rodish", "Jack 3;
  int len = avr. length;
  (chan order = input. neset 1). (han At (0);
  ib (order = = 'A') {
  for (int : =0', icles; i++) {
indesignification (int) = i + 1; i 2 avor. length; i++)}
             if (wor [i] compare To (wor[i]) o)}
        Kepro [] Ostring tempo = ovi [i]
        arr [i] = arr [i]
                  aur [i] = temp;
        int 53 [3 ] mon = thour [3] [3]
           3 (C++1 & 5 = 0= 1 + 1 ) sof
      system. out. Println (A varys. to string (our));
```

```
elso if looder == 'p') {

for (int i = 0; i2 len; i++) {

for (int i = 1 i + 1; j 2 arr. length; j+t);

if (avor [i]. compare To (avor [i]) > 0) {

ptring temp = avor [i];

over [i] = tem p;

}
```

Col to not 1 hour togain notes not

14.

Write à Program for martix multiplication?

class Matrix Multiplication

Public stodic void main (string [] args){

int [] [] mot 1 = 1/21, 23, 15, 3] 3;

int [] [] mat 2 = 1/2, 33, 24, 135;

int [] [] result = new int [] [] [] []

bod (int i = 0; i < 2; i++) {

for (int j = 0; j < 2; j++) {

pos (int K = 0; K < 2; K++) {

posult [] [] [i] [] + = mot | [] [] [K] * mode [K] [];

posult [] [] [i] + = mot | [] [] [K] * mode [K] [];

```
system. out. Println (" Mot sum = ");
        for list i = 0; i < 2; i+t) {
            for lints = 0; 5 < 2; 5++ ) }
              System. o.t. Print (rusult [i] [i] + "];
            system. out. Print In();
         it is the other old of the printed it
       man Number of himse provided ?
   Output: Mat som= 10.5
15. Write a Program to Print the following Pottern
   impost java util . scenner;
   Public class Pattern Printerh morgan?
      Public stutic void main (string [Jongs)4
         Scanner input = new Scanner (system . in);
         system. out. print ("Enfer the number to be printed:");
         int x = input . next Int ();
        system. out Print I"Mase Number of times printed: ").
        int n = input next In ();
      (n) foo (int i = 1 - i c = 2 * n - 1; i + )}
           int count = i <= n2; 2 * n-1;
```

system. out. Point In (staines, value of(x) repeat (count)); in put. close (); Matting too may Enter the number to be printed:1 mass Number of times printed: 3 Output: Output: Mot som=10 5 15, With a Program to Prost the Hollowing Puttons more the not form

16. Write a Program to print the special characters separately and print number of special character in the line?

impost java ... util. Scanner;

Public class special character counter h Public static void main (slrings [] args]

sconner input = new sconner (system. in);
system. out. Println ("Enter a line of text:");
string s = input. next Line();

```
I mint sp=0; mans mas type omas?
     system. out. Print ("special characters: ");
     for (than ch = s. to chan Array 1))
        if (! Character is letter or Digit (ch))}
          SP++;
          system. out. Print (ch);
     system, out. Println ("In Number of special
( aun til strogma di moloco chanacters: "+ sp);
             it from a to ) robben for bolso;
Output:
      pool 1501 = 2 1 c = Molh 1421 lour
     Enter a line of text: # Lello
      special characters: # *
      Number of special characters: 2
```

17. Write a program to Print all the Composite number between a and b? I sugar impost java. unil. scanner;

Public class Composite Numbers 4

Public static void main (string [Jargs])

```
Scanner input = new scanner (system in );
        ind a = input next (n 1);
        Wint be input neart Int (1)
        for (int i = a+1; i 2 b; i++) 2
             if lis composite (i))4
               system. out. Print (i+ ""):
    sylve out the land of special
      Public static boolean is composite (int num) {
         if (num 24) redus polso;
         box lint i = 2; ic = Malh. squi (num); 1++)4
         if (num o/o i == 0) advan true
                   the - and comment lower
        return felse; l'arge je redonne
17 White a program to Print all the Strapperto
    number between a and be pl &1 : tugner
    Output: 14 15.16 19 manage the poor tropper
```

Chile City Longraphia Num

Police smore and man loss of the

```
18. Write a Program la Print the Invented
    Full Pyramid Pattern?
     impost java voil. scanner;
     Public class Invented Pyramid 4.
         Public static void main (storing [ Jungs) 4
            int n = new scanner (system. in). next Int();
            bod (int i=n; i> =1; i--)}
      Ognorensystem od. Print (" ", repeat (n - i));
     system. out. Println (" +". ru peat (i));
           System out. Printle ("man: " + man.);
double median = (a. 10gth "las= =0)? (a [u. 10glp]) - ]
    7 a [o. 1001 h 2]) /2.0.
3 a [o. 1001 h 2];

2 [o. 1001 h 2];
   Output: (acitem; acitem!) altima too molope
mup a interest, lotes as a contrap = non that Mup a bis
```

should be the yel Ox Defall find, old all fi

in and = and Map menue Count is

19. Find the Mean, Medain, Mode of the array of numbers?

impost java. ulil #;

Public class statistics

Public static void main (string [] args) {

int [] a = {16, 18, 27, 16, 2>, 21, 193;

Arrays. root [a):

double meen = Arrays stream (a) average (). 08

System. out. println ("Mean: "+ mean);

double median = (a. length % 2 = = 0) ? (a [a. length /2-1]

T a [a. length 12]) /2.0:

a [a length 12]

System. out. Println l'Median: "+median);

Mop & integer, Integer > count Mop = new Has Map (>6);

int mode = a [0];

for lint non : a) 4

int wont = count Map. merge (num, 1, integer :: sun)'
if I wound > but Map. get Or Default Imade, o'll mode = non;

```
system - out. println ("Modo: " + red mode);
    Output !
        Mean: 20.0
        median : 14.0
        Mode : 16
20. Find the factorial of n?
   impost java. util. Scanner;
    Public class Factorial &
        Public static void main (string [] angs)}
           Scanner input = new scanner (system. in);
          int n = input. next (nt ();
         int fact =1;
          for (inti=1; ic=n; fact * = i++);
           system. out. Println (n+ "Factorial = " +fact);
    Imput: 4
    Dotput: 4 Factorial = 24
```