

LABORATORY WORK BOOK

Name of the Student No Ravi Chandrila Class CSD-B Semester Dord Semester Course Code: A 17002 Course Name: Polaboratory						Roll Number			
						239	5 / A 6	7	B 3
Cou	irse Coc	de: A ITD02 Course e Course Faculty M.S.: A	Name :	ນນຳດາ			The second second		
Nan	ne of the	e Course Faculty	Weel	Number :	ς <i>i</i> ,		Date :	المحل	
Exe	MAR MAR					(S AWARDED			
	Exercise Number	EXERCISE NAME	Aim/ Preparation	Algorithm / Procedure		Source Code	Program Execution Viv	Viva -	
				Performance in the Lab		Calculations and Graphs	Results and Error Analysis	• Voce	Total
			4	4		4	4	4	20
1	5.1	Is the phone no format- ted correctly	4	2	2	a	4	ч.	20
2	5-2	Basic E-mail validation	4	2	2	, U.,.	4.	U	20
3	5-3	Valid C# Comments	4	2	2	Ç	4	U	100
4	6-4	1Pv1 validation	Assert	2	2	Tun'!	C. In the	V.	20
5	6-5	Parword validation	Y.	. 2	2	10)	1 (W .)	и".	20
6	5-6	valid the scode	4	2		U	4	, h	20
7	5-7	Retrieve hostname	4	2	2	V	4	4	20
8	5-8	Retrive hostname & IPAddress	4	2	کند.	U	4	4	w
9	5-9	Retrine IPAddress of a Domain name	4	2	2	4	4	3	79
10	5-10	Retrive 1844, 1846 Address Check address lambu	4	2	~	4	4	3	19
11	5-11	Retrive hostname boxed on IPAddrey.	4	2	\sim	Y	4	4	20
12				4,41				NET.	

N. Ravi Chandrika Signature of the Student

Signature of the Faculty

continue thereof

START WRITING FROM HERE

```
51 Lin: Create a function that earns a string and returns true it this is
    the format q a passes place number and falls if it's not.
    using Speems
   wing System. Text Copplants previous:
   public class Program
    public State beat Intelled Phone Number (String phonenhumber)
       String patton = @"1/c/d{331)/d{3}-1d {4} $;
       return Reger-9s Moder (phonenlumber, patien);
    public Static void MainO
    Conside Writeline (Is Valid Phone Number ("(123) 456 - 7570"));
    Console Writeline Cavalid Phone Number ("cur) 555 -2345");
   Console Writeline (Bladid Phone Number ("(098)123-4567"));
                                            SE SHIP WITH BEING
 Output:
                                             True
                                           Falle
   False.
```

2 Am: Create a function that accepts a string, Checks if it's a valid email address and vietures either true of false, depending on the evaluation.

```
Language Control
Code:
using System;
Public Clax Potogram
 public static book Validate Email (string email).
                                     1 The Market And Syn 1995 .
    int at Index = kmail. Index of ('6');
    it(at Index 2 =0)
    ordus lake;
    int dot Index = email. Index of ('-.', at Index +1);
   it (dot Indeaz = at Indea+1)
     ordun Jalse;
                                      tipori - karoiz fi 4
   it (dotIndex = = email. length -1)
      ordun false; Marchillegil so digned degrade a silver
   outun true;
   public static void Maines
    Consde. Writcline (validate Email ("@gmail-com"));
    Console. Writeline (validate 5 mail ("hello@gmail.com"));
   Console Writeline (Validate Frail ("gmail"));
   Console Writeline (Validate Email ("hello@gmail"));
   Console Writeline (validate Email ("hello@dabit.com"));
```

```
Octopul:
                                                                                                                 Calv
                             Talic
                                                                                                              Polse
                              Talle
                                                                                                         Truc:
-Aim: In ctt, consider two types of comments:
          - Singe Line comments Starts with "11"
         - Multi line of block comments 8 all with 1x & end with 1.
                                                                                                                                                                                                                                                                                       (क्यों ची अनेबाक्षरे) अहाई हुई
Code:
 using System;
public static bool Comments Correct ( String input)
 9
                              int 7=0;
                          while (i zinput length)
                                                                                                                                                                                           Kiroligaal jõrnes - renkulekaji lii
                           3
                                          if (i+1 z input. length && input [i] == 11 &&
                                                                                                                                                                                                                                            input(i+1)='1')
                                                                                                                                                                                                                                                                                                                             THE mobile
                                                               1+= 2;
                                                                                                                                                                                                                         en into him shots, when
                                         clse il (i+ zinput lingth & & input(i) == 11 & &
                                  input[i+1] == (*)
                                                                                                                    A line of the state of the stat
                                                                       the him of state of the man to be in the state of a state of the state
                                         it Ci+12 input length & & input [] == '* & &
                                                                                                                                                                                                                                                                          "nput[i+1] == 1/1)
                                                               it = 2:
```

5.3

else ordurn talse; Eministral interior and and College Merchalle Tratage States 3 Erry Dragger else restrict masters return labe; Mari Hippale Berg at 1 and have Allow that carries ice must be tout best mention it oreturn true; is about metric Console Writeline CommentsCorrect ("11111")); Console Writeline (Comments Correct ("1**//**////)); 15 .. Console. Writeline (Comments Correct ("11/*/**/")); Console. Writeline (Comments Correct (" 11111")); Output: KUD Januario True True tunt authic False or the state votal Marine False: Aim: Create a function that takes a String and sectums the if the IP is vouid of falle 11 its not. a string supresenting the IPV4 Address. Valta of later when being

```
Code:
Using System;
Public class Traddies Validator &
  Public Static bool Is Valid TP (string ip) &
     String () part = ip-split('.');
     H(parks. Lungth! =4)
      ordin jalk;
   tor (int i=0; 12 pauls. lingth; it+) {
      String parts parts (i);
     if ( lint-Try Parse (part, but int nums)
       ordun jalu;
     II (hum coll num >256) 1 months mun 1105 mun) 11
       orduin falx; in the language of the same
    Et (part length > 1 & & part (o) == '0')
   er section false; "" IIII" ) har a deren mail an entre a section
   Îf (1==3 && num ==0)
                                                       ilu: Inc
     oreturn jaux;
   oreturn true;
                                                      5.31
public Static void Mainc)
                                                      Consde. Writcline (Is Valid IP("1.12.3.4"));
   Consde . Writcline (Ds Valid IP("1-2-3"));
   Console. Writeline (BValid PP("1-2-3.4-5"));
  Console- Writeline (IsValid PP("123.45.67.89")).
```

```
Conside Wolletine Chyalidar ("153-456-18,900);
     Console World Chrotid TP("123. Our. 067. 087")
3.
Odpul "
   True
                     Truce
   False
                     Talse
                     Paluc -
   False
-Mm: Create a function that validades a password based on the
following outles, given.
              it part l'i handade i data la plidade l'i l'archidi
Code:
          wing System; co and in bound intelled with the
using System-ling;
Using System. Text. Regular Expressions;
public class Passwood Validatos
 public Static bool validate Parsword (String Parsword)
  2 TI (password. Lingth < 6 ll password. Lingth > 24)
      ordun jalse;
   if (! password. Any Cchar. Tsupper)
                       present a freezencie front begin with
     oreturn false:
   it (1 payword. Any (Char. Islower)).
                     istraction to the other one of the action
     oretun false;
   it ci panword. dry Cchar. Digit)
     orchum false;
                           7/16
```

5.6

```
H(Reger- Is Match (parword, &'C.)12 {2,7"))
     String valid&pecialchaus = "! OH&1/.1 &*()+=-83[]:;1"!? .. es.
    toreach (char c'in parxword)
      It (! Char. Isletter Digit co> & & ! valtel Special chars. Contains (0)
        oretur false;
                                                         1
    onetwon true;
                void MainC)
   public Static
    Console. Writeline (Validate Passucord ("P122@"));
    Console Writeline (Validate Password "iloveyou");
   Console Writeline (Validate Parword ("Fhg93@"));
                                otobile bound rela
Output: False
                     point Theorem by validation and which
         False
                  the end open maked to a se four granded which is
         True.
```

Create a function that determines, whether a string is valid Aim: hercode a hercode must begin with a pound key # and i exactly 6 character is length. Each character must be a digit A -C. All alphabetic from 0-9 or an alphabet character from characters may be uppercare or towercouse.

" ar Albanda"

```
Cocket
 wing Cystem;
 wing System. Text Pegules Capressione;
 public class Hercode Validades &
          public Static had awalled and colored codes?
                         Storn pattern a O" 1/1 Curan era -17 863 4";
                         onchun Regen Timalch Cook, patterns,
                                                                                                         exceptions of the state of the 
          public Static void Madines &
                 Console. Would dine (Tsvalid-HénCode ("In conciscio);
                Console. Writeline (Trated Hen Code (" 11 Eneccent);
               Conside Walld Hancode (" Heacce ");
              Console - Waiteline Crivatel to mende (" 11 e Dr cs 80");
             Consde. Waileline (Psvalidlen Code ("11 cosc + ("));
       Oulput:
                                                                    withrugant marries to bett making
                                                                                                                                                     Hadring II. Lare
                                                                     Palse.
                       Truc
                                                                                                                                                                                                          A Property of
-Uiw:
  create a function that outrieves the hostname
                                                                                                                                                                                                      the
 local machine. The function should actum the hostname
 of the machine ion which code is running.
 - No input is organized for this function.
```

9/16

girlan ras somilarat

```
ROLL NUMBER
        code:
        using System;
       using System. Net;
       public class Host Name Reliferer
        public Static String Gretlocal Host Name()
           Julian DNS. GretHostName();
        public Static vord Maine)
          Conside Writeline Chettocal Host Name (?
                    Ballet British of the State of the State of the
                        art opplies Addresser () see () to see a light was
             DU12055-
   Create a function that oretrieves hostname and the IP Addresses
,- 8 -ffm:
   of the local machine. The function should display the hostname
  and all associated IP Addresses.
  Code:
  Wing System;
  using system-Net;
 public class Metworkanto
   public Static void Display/lost Name And IPAddresses ()
   S
      String host Name = Drs. Giet HOST Name C):
     Console. Wasitchine C"Host Name of machine = "+ host Mame);
                              10/16
```

Powbly linked list (favioaud Tolaversals: 5.10

```
117 Naldaien [7] aiddrener - fans failthau haidaener Chepharay;
     Console wantelmeting Authorisesses of that mark ");
     Apreads (Popoldreed oddren In oddrenses)
       Console. Walteline Caddrew Tostring 33;
  public slatte void motions
                      XIX THE TANK OF THE PARTY OF THE PARTY.
      Displaystost Name and TP Addressess ()
                         TOTAL FOLLY
Ordbin:
-Host Name of Machine - Delloss for the many
TP Addressees of Machine: Pero: 2010: 1078: 61db: CTSOTILL.
                        192-168-1.10-
-Vim:
Create a function had sectrieves the producesses of the given
domain name
Ode:
using Systems
cusing system. Nets
public class Domain IPRedrieves
Public Static void Gretz PAddress of String dorrain Homes
         HOLL STANDED TO BE TO THE MENTAL STANDED TO THE
   3
     try
           IPAddrene Jaddrenes: ons. Gettost Addrenes ();
```

```
Conside Westerine Cooldress Ces) of & domain Mame 3: ");
  ROLL NUMBER:
      foreach (IDA daress address in address in
        Console. Waiteline Coddrew - Tostring());
     Console. Writeline (f"Error oretriering To Addresses");
   calch CEnception em
  public static void maines
    GUPPAddoiencs ("www. bing.com");
3.
output:
ap Addressess of www.bing.com:
   23-65-124-99
    23.65.124.97.
```

5-10

Create a function that retrieves and displays both 1944 and -Nim: 1PV6 addresses of Local machine separately by checking the address jamily. The function should first output the hosts name of the machine, followed by a separate lists of the 1744 & 1746 address.

```
...MBER
ROLL NUMBER :
çede:
                         white wild the same
using system;
using System. Het;
wing system. ling;
public class local appedrieves
  public static upid Display-Hort Name And IP Addresses
     string host Name = Dris-Gel + lost Namecs;
     Conside. Writelfre ("Host Name of machine =" + host Name);
     op Addrews ] addresses = Dns-Get-Host Addresses Chost Names;
     vas ipva Addocsses = addresses. wherelip => 9p. Address family);
     console Waiteline ["IPV4 -Addressces) of Machine:");
    to each Copradises ipry in pour addresses
                       Conside. Wollteline (ipvLi. To Stringes);
     var ipro Addresses = addresses - wher Cip = > ip. Address family);
     console. Woulteline (") pro Addoresses) of Machines");
     foreach (DPAdderers This PO PPNG Addererses)
 and Salp-from sout + ": 11" I was in the
         Console- wortteline (Ppv6. Tostring();
                                    public static void maines
         Oisplay-110st Name And PPAddresses ();
                                      TOO I THE SECTION IN COLUMN
```

ROLL NUMBER:

```
11200
     Output:
     Host Name of Machine & Dellooss
    PPV4 Addressess q Machine: 192.168-1-10
    The Addresscess of Machine: fe 80: :3010:7678: 61db: C75d/.4.
    -Aim:
Create a function that takes an IPAddoiers as input and
5.11 Am:
    setuins the hostname associated with that IP Address.
            feedulija ... proposis proposis političi salite filikar salednjih
             e to not the remaining to be able to accordance if the mistrative to
     Code:
                      gi ca glicarous emperador y exercical regi emp
     Wing System;
                         The temperators and the language of south
     using System. Net;
     public class aptotlast Name
        public static void Display-Host Name (String ip Address)
                       TERISON VI TING TO ANN HOLDING
                         Congress of many spirited sections of
        3
           tru
                2 PHOSTERTY hostentry = Drs. GetHost Entry Cog
               Conside. Worteline C" Host Alame of IP Address "+
                         "paddress + "is: " + host Entry . Host Names;
                        الكابان التحديد والمسأران المتعدد والواحد الأله وعرور
           catch Cenception en)
               Console. WatitelPhe (&"Erros: gen. Hexages
                                ne challennia of prince
         public static void mais
```

J. Display-tlost Name ("201.77.197.200");

J. Qudpud:

Host Name of IPAddiess 204.79.197.200 is:

a -0001. a-msedge.net.

2