Logic Building Session Day 5: May 2021

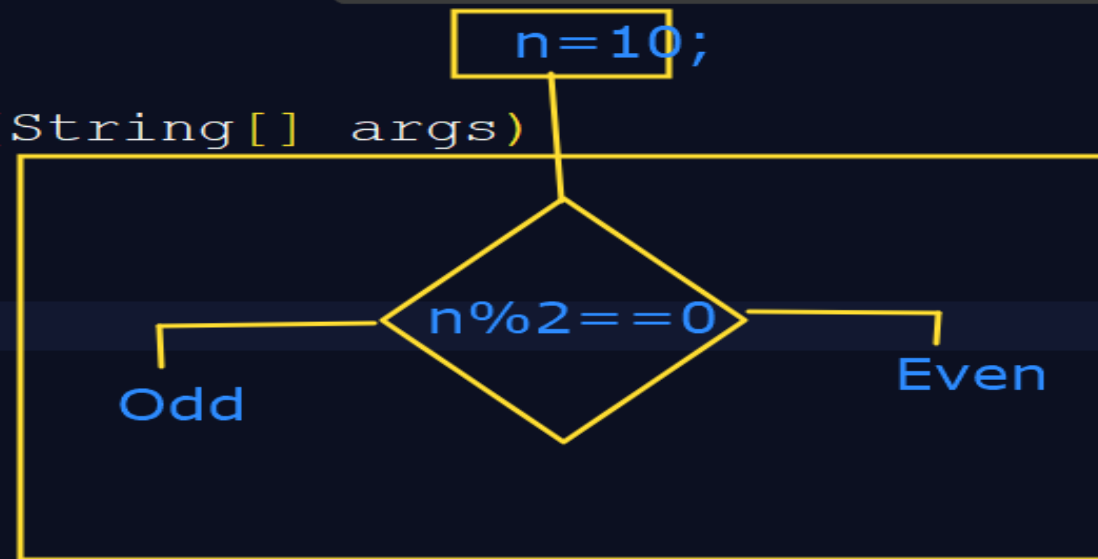**Kiran Waghmare**

May21 LB Notes.txt | P1.java
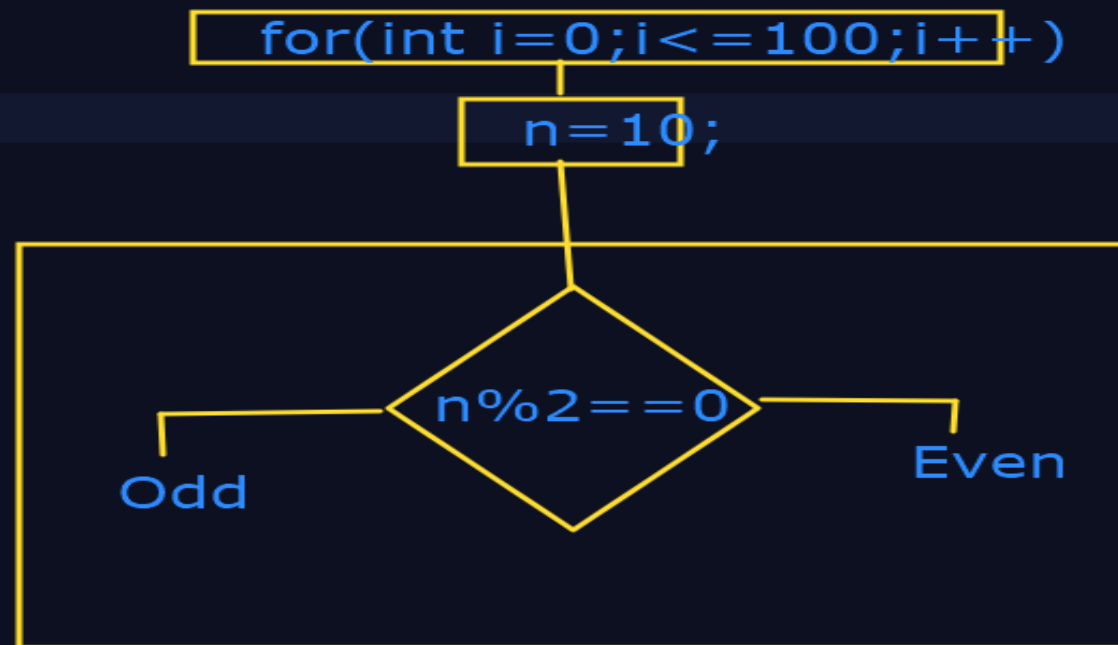
```java
import java.util.Scanner

public class P1
{
    public static void main(String[] args)
    {
        int n=10;
        if(n%2 == 0)

    }
}

//n
/*
Q=n/2
R=n%2
R==0=> Even
Method1: If-else
Method2: Ternary
Method3: n=n+2
Method4: Switch case
```

n=10;

n%2==0

Odd   Even

Mouse Select Text Draw Stamp Spotlight Eraser Format Undo Redo

File   Edit   Search   View   Encoding   Language   Settings   Tools   Macro
Mouse   Select   Text   Draw   Stamp   Spotlight   Eraser   Format   Undo   Red

Who can see what you share here? Recording On
You are screen sharing

May21 LB Notes.txt   P1.java

```
13              }
14      }
15
16
17      //n
18      /*
19      Q=n/2
20      R=n%2
21      R==0=> Even
22      Method1: If-else
23      Method2: Ternary
24      Method3: n=n+2
25      Method4: Switch case
26
27      ----------------------------
28      Series: 1 to 100
29      Method5: Method
30      ----------------------------
31      Series: 3,6,11,45,56,78
32      Method6: Arrays
33      */
```

for(int i=0;i<=100;i++)

n=10;

n%2==0

Odd   Even

ava source file   length : 482   lines : 33   Ln : 15   Col : 1   Pos : 235   Windows (CR LF)   UTF-8   INS

```java
import java.util.Scanner;

public class P2
{
    public static void main(String[] args)
    {
        char ch='i';
        if(ch=='a'||ch=='e'||ch=='i'||ch=='o'||ch=='u')
            System.out.println(ch+"is vowel");
        else
            System.out.println(ch+"is consonant");

    }
}

//Logic flow:
alph= character
vowel: a,e,i,o,u
A,E,I,O,U
```

Vowel   consonant

c=0
c=c+1;

Who can see what you share here? Recording On

You are screen sharing

May21 LB Notes.txt   P2.java

```java
import java.util.Scanner;

public class P2
{
    public static void main(String[] args)
    {
        char ch='i';
        if(ch=='a'||ch=='e'||ch=='i'||ch=='o'||ch=='u')
            System.out.println(ch+"is vowel");
        else
            System.out.println(ch+"is consonant");

    }
}

//Logic flow:
alph= character
vowel: a,e,i,o,u
A,E,I,O,U
```

Vowel   consonant

c=0
c=c+1;

File Edit Search View Encoding Language Settings Tools Macro

Mouse Select Text Draw Stamp Spotlight Eraser Format Undo

Who can see what you share here? Recording On

You are screen sharing

May21 LB Notes.txt | P2.java

```java
import java.util.Scanner;

public class P2
{
    public static void main(String[] args)
    {
        char ch='i';
        if(ch=='a'||ch=='e'||ch=='i'||ch=='o'||ch=='u')
            System.out println(ch+"is vowel");
        else
            System.out.println(ch+"is consonant");

    }
}

//Logic flow:
alph= character
vowel: a,e,i,o,u
A,E,I,O,U
```

vowel

```java
import java.util.Scanner;

public class P2
{
    public static void main(String[] args)
    {
        char ch='i';
        if(ch=='a'||ch=='e'||ch=='i'||ch=='o'||ch=='u')
            System.out println(ch+"is vowel");
        else
            System.out.println(ch+"is consonant");

    }
}

//Logic flow:
alph= character
vowel: a,e,i,o,u
A,E,I,O,U
```

vowel

File Edit Search View Encoding Language Settings Tools Macro

Mouse   Select   Text   Draw   Stamp   Spotlight   Eraser   Format   Undo

Who can see what you share here? Recording On

You are screen sharing

May21 LB Notes.txt   P4.java

```java
import java.util.Scanner;

public class P4
{
    public static void main(String[] args)
    {
        int n=3;//input

        if(n==0||n==1)
            System.out.println(n+"is not prime no");
        else
        {
            for(int i=2;i<=n/2;i++)
            {
                if(n%i==0)
                {
                    System.out.println(n+"is not prime no")
                    flag=1;
                    break;
                }
            }
            if(flag==0)
                System.out.println(n+"is prime no";
```

7

0 1 2 3 4 5 6 7

Prime

File Edit Search View Encoding Language Settings Tools Macro   Mouse   Select   Text   Draw   Stamp   Spotlight   Eraser   Format   Undo   Red

Who can see what you share here? Recording On

You are screen sharing

May21 LB Notes.txt   P4.java

```java
import java.util.Scanner;

public class P4
{
    public static void main(String[] args)
    {
        int n=3;//input

        if(n==0||n==1)
            System.out.println(n+"is not prime no");
        else
        {
            for(int i=2;i<=n/2;i++)
            {
                if(n%i==0)
                {
                    System.out.println(n+"is not prime no")
                    flag=1;
                    break;
                }
            }
            if(flag==0)
                System.out.println(n+"is prime no";
```

7

0 1 2 3 4 5 6 7

Prime

File Edit Search View Encoding Language Settings Tools Macro

Mouse   Select   Text   Draw   Stamp   Spotlight   Eraser   Format   Undo   Red

Who can see what you share here? Recording On

You are screen sharing

May21 LB Notes.txt   P4.java

```java
{
    public static void main(String[] args)
    {
        int n=3;//input
        int flag=0;

        if(n==0||n==1)
            System.out.println(n+"is not prime no");
        else
        {
            for(int i=2;i<=n/2;i++)
            {
                if(n%i==0)
                {
                    System.out.println(n+"is not prime no")
                    flag=1;
                    break;
                }
            }
            if(flag==0)
                System.out.println(n+"is prime no");
        }
```

```
      7

      8

      9

     10          }
     11  }

     12

     13  //Logic flow:
     14  armstrong number:
     15  n=153
     16  153=(1*1*1)+(5*5*5)+(3*3*3)
     17      =1^3+5^3+3^3
     18      =1+125+27
     19      =153
```

You are screen sharing

Who can see what you share here? Recording On

```java
import java.util.Scanner;

public class P7
{
    public static void main(String[] args)
    {
        int n=153;
        while()



    }
}

//Logic flow:
armstrong number:
n=153
153=(1*1*1)+(5*5*5)+(3*3*3)
    =1^3+5^3+3^3
    =1+125+27
    =153

371
```

$23/10=2 =>$ Quo
$23\%10=3 =>$ Rem

$n\%10=\boxed{3}$
$n/10=15$

$n=15$
$n\%10=\boxed{5}$
$n/10=1$

$n=1$
$n\%10=\boxed{1}$
$n/10=0$

May21 LB Notes.txt   P7.java   new 1

```java
import java.util.Scanner;

public class P7
{
    public static void main(String[] args)
    {
        int n=1531;
        int x=n;
        int a,c=0;
        while(n>0)
        {
            a=n%10;
            n=n/10;
            c=c+(a*a*a);
        }
        if(x==c)
            System.out.println(x+" Armstrong Number");
        else
            System.out.println(x+" Not a Armstrong Number");
    }
}
```

23/10=2=>Quo
23%10=3=>Rem

n=153 n%10=3
n= n/10=15
----
n=15
n%10=5
n/10=1
----
n=1
n%10=1
n/10=0

May21 LB Notes.txt   P7.java   new 1

```java
import java.util.Scanner

public class P7
{
    public static void main(String[] args)
    {
        int n=1531;
        int x=n;
        int a,c=0;
        while(n>0)
        {
            a=n%10;
            n=n/10;
            c=c+(a*a*a);
        }
```

23/10=2=>Quo
23%10=3=>Rem

n=153 n%10=3
n=   n/10=15
----
n=15
n%10=5
n=n/10=1
----
n=1
n%10=1
n=n/10=0

Mouse　Select　Text　Draw　Stamp　Spotlight　Eraser　Format　Undo

May21 LB Notes.txt　　P7.java　　new 1

```java
import java.util.Scanner;

public class P7
{
    public static void main(String[] args)
    {
        int n=1531;
        int x=n;
        int a,c=0;
        while(n>0)
        {
            a=n%10;
            n=n/10;
            c=c+(a*a*a);
        }
```

23/10=2=>Quo
23%10=3=>Rem

n=153　n%10=3
n=　　n/10=15
----
n=15
n%10=5
n=n/10=1
----
n=1
n%10=1
n=n/10=0

c = x
c = x

May21 LB Notes.txt   P8.java   new 1

```java
import java.util.Scanner

public class P8
{
    public static void main(String[] args)
    {
        int n=525;
        int temp=n;
        int r,sum=0;
        while(n>0)
        {
            r=n%10;
            sum=sum*10+r;
            n=n/10;
        }
        if(temp==sum)
            System.out.println("Palindrome");
        else
            System.out.println("Not Palindrome");



```

5   52*10+5
5*10+2=52
0*10+5=5

525 r=n%10=>R
sum =sum*10+r;
n=n/10;

Java source file   length : 469   lines : 36   Ln : 10   Col : 19   Pos : 172   Windows (CR LF)   UTF-8   INS