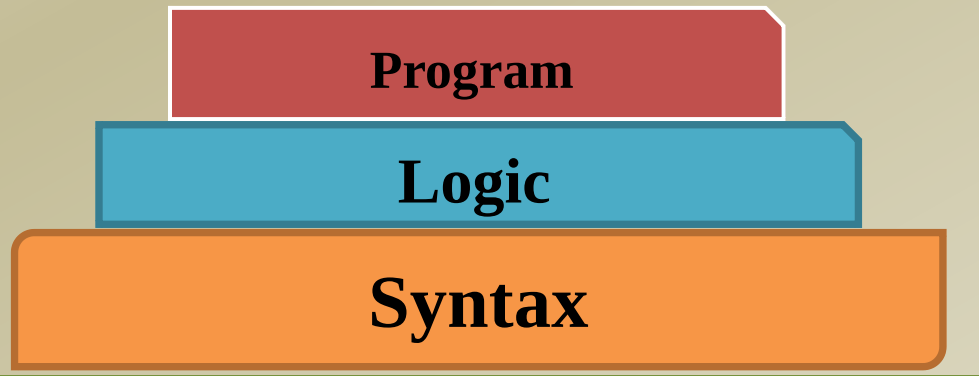
Code at Random (OPC) PVT. LTD.

Module 5: Do while Programming



Programs To Practice On Do While Loop

1. WAP to input a number & print the sum of its digit.
2. WAP to input a number & print the product of its digit.
3. WAP to input a number & print all the even digits.
4. WAP to input a number & print its maximum digit.
5. WAP to input a number & print it in reverse.
6. WAP to input a number & check whether it is Armstrong or not.
7. WAP to input a number & check whether it is Palindrome or not.
8. WAP to input a number & check whether it is Automorphic or not.
9. WAP to input a number & print its HCF using long division method.
10. WAP to input a number & print its LCM, without using HCF.
11. WAP to input a number and check whether it is a perfect square or not.

Solutions To Above Questions

1.
```
import java.util.*;
class sum
{
    public static void main(String[] Args)
    {
        int n,d,s=0;
        Scanner sc= new Scanner(System.in);
        System.out.println("Enter a number");
        n=sc.nextInt();
        do
        {
            d=n%10;
            s=s+d;
            n=n/10;
        }while(n>0);
        System.out.println("Sum of digits is "+s);
    }
}
```

2.
```
import java.util.*;
class product
{
    public static void main(String[] Args)
    {
        int n,d,p=1;
        Scanner sc= new Scanner(System.in);
        System.out.println("Enter a number");
        n=sc.nextInt();
        do
        {
            d=n%10;
            p=p*d;
            n=n/10;
        }while(n>0);
        System.out.println("Product of digits is "+p);
    }
}
```

Solutions To Above Questions

3.
```
import java.util.*;
class even
{
    public static void main(String[] Args)
    {
        int n,d;
        Scanner sc= new Scanner(System.in);
        System.out.println("Enter a number");
        n=sc.nextInt();
        do
        {
            d=n%10;
            if(d%2==0)
            {
                System.out.println(d);
            }
            n=n/10;
        }while(n>0);
    }
}
```

4.
```
import java.util.*;
class maximum
{
    public static void main(String[] Args)
    {
        int n,d,max=0;
        Scanner sc= new Scanner(System.in);
        System.out.println("Enter a number");
        n=sc.nextInt();
        do
        {
            d=n%10;
            if(d>max)
            {
                max=d;
            }
            n=n/10;
        }while(n>0);
        System.out.println("Maximum digit is "+max);
    }
}
```

Solutions To Above Questions

```
5. import java.util.*;
class reverse
{
    public static void main(String[] Args)
    {
        int n,d,r=0;
        Scanner sc= new Scanner(System.in);
        System.out.println("Enter a number");
        n=sc.nextInt();
        do
        {
            d=n%10;
            r=r*10+d;
            n=n/10;
        }while(n>0);

        System.out.println(r);

    }
}
```

```
6. import java.util.*;
class palindrome {
    public static void main(String[] Args)   {
        int n,d,r=0,t;
        Scanner sc= new Scanner(System.in);
        System.out.println("Enter a number");
        n=sc.nextInt();
        t=n;
        do {
            d=n%10;
            r=r*10+d;
            n=n/10;
        }while(n>0);
         if(t==r)
            System.out.println("Palindrome Number");
        else
            System.out.println("Not a Palindrome Number");

    }
}
```

Solutions To Above Questions

```
7. import java.util.*;
class Armstrong {
    public static void main(String[] Args)    {
        int n,d,s=0,t;
        Scanner sc= new Scanner(System.in);
        System.out.println("Enter a number");
        n=sc.nextInt();
        t=n;
        do   {
            d=t%10;
            s=s+(d*d*d);
            t=t/10;
        }while(t>0);
        if(n==s)
            System.out.println("Armstrong Number");
        else
            System.out.println("Not a armstrong number");

    }
}
```

```
8. import java.util.*;
class gcd {
    public static void main(String[] Args)    {
        int a,b,r,t;
        Scanner sc= new Scanner(System.in);
        System.out.println("Enter two numbers");
        a=sc.nextInt();
        b=sc.nextInt();
        if(a>b){
            t=a;
            a=b;
            b=t;
        }
        do   {
            r=a%b;
            b=a;
            a=r;
        }while(b%a!=0);
        System.out.println("GCD is "+a );
    }
}
```

Solutions To Above Questions

```
9. import java.util.*;
class Automorphic {
    public static void main(String[] Args)    {
        int c=0,sqr;
        Scanner sc= new Scanner(System.in);
        System.out.println("Enter a number");
        int n=sc.nextInt();
        sqr=n*n;
        int t=n;
        do        {
            c++;
            t=t/10;
        }while(t>0);
        double lastsquaredigits = sqr%(Math.pow(10,c));
        if(n==lastsquaredigits)
           System.out.println("Automorphic Number");
        else
            System.out.println("Not a Automorphic number");
    }
}
```

```
10. import java.util.*;
class lcm {
    public static void main(String[] Args) {
        int a,b,m,t;
        Scanner sc= new Scanner(System.in);
        System.out.println("Enter two numbers");
        a=sc.nextInt();
        b=sc.nextInt();
        if(a<b) {
            t=a;
            a=b;
            b=t;
        }
        m=a;
        do
        {
            m=m+a;
        } while(m%b!=0);
        System.out.println("LCM Is"+m);
    }
}
```

Solutions To Above Questions

11.
```
import java.util.*;
class perfect_square {
    public static void main(String[] Args) {
        int n, s=0 , i=1;
        Scanner sc= new Scanner(System.in);
        System.out.println("Enter a number");
        n=sc.nextInt();
        do {
            s=i*i;
           if(s == n) {
            System.out.println("Perfect Square");
            break;
            }
           else if(s>n){
           System.out.println("Not a Perfect Number");
           }
          else{
           i++;
          }
      }while(s<=n);
   }
}
```