**Loops Example Programs**

**1.Two number are entered through the keyboard. write a program to find the value of one number rasied to the power of anthor.(Do not use Java built in method).**

/\*Two number are entered through the keyboard. write a program to find the value of one number rasied to the power of anthor.(Do not use Java built in method)\*/

import java.util.Scanner;

class PowerOfTwoNumbers

{

public static void main(String[] args)

{

Scanner sc = new Scanner(System.in);

System.out.print("Enter the Power is: ");

int power = sc.nextInt();

System.out.print("Enter the Base is: ");

int base = sc.nextInt();

System.out.println();

int result = 1;

for(int i =1;i<=power;i++)

{

result = result\*base;

}

System.out.println(base+" power "+power+" is: "+result);

}

}

Output:

Enter the Power is: 4

Enter the Base is: 5

5 power 4 is: 625

Press any key to continue . . .

**2.Write a program for reversed the Integer Number(Ex: 12345 ---> 54321).**

/\*Write a program for reversed the Integer Number(Ex: 12345 ---> 54321) \*/

import java.util.Scanner;

class IntegerReversed

{

public static void main(String[] args)

{

Scanner sc = new Scanner(System.in);

System.out.print("Enter The Integer Number: ");

int num = sc.nextInt();

int reverse = 0;

int temp;

int remainder =0;

temp = num;

/\*main logic of program\*/

while(temp>0)

{

remainder = temp%10;

reverse = reverse\*10+ remainder;

temp = temp/10; //temp /= 10;

}

System.out.println(); // just for output format

System.out.println("Reverse of Integer Number"+num+" is: "+reverse);

System.out.println(); // just for output format

}

}

Output:

Enter The Integer Number: 12345

Reverse of Integer Number12345 is: 54321

Press any key to continue . . .

**3. write a program that reads a set of integers, and then print the sum of the even and odd integer(sum of the even numbers and odd numbers).**

/\*write a program that reads a set of integers, and then print the sum of the even and odd integer(sum of the even numbers and odd numbers)\*/

import java.util.Scanner;

class SumOfEvenAndOdd

{

public static void main(String[] args)

{

Scanner sc = new Scanner(System.in);

int number;

char choice;

int evenSum = 0, oddSum = 0;

do

{

System.out.print("Enter the Number: ");

number = sc.nextInt();

if(number%2==0){

evenSum = evenSum+number;

}

else{

oddSum = oddSum+number;

}

System.out.print("Do you want to continue y/n? :");

choice = sc.next().charAt(0);

}

while (choice=='y'||choice=='Y');

System.out.println("Sum of the even numbers: "+evenSum);

System.out.println("Sum of the odd numbers: "+oddSum);

}

}

Output:

Enter the Number: 2

Do you want to continue y/n? :y

Enter the Number: 3

Do you want to continue y/n? :y

Enter the Number: 6

Do you want to continue y/n? :y

Enter the Number: 1

Do you want to continue y/n? :y

Enter the Number: 19

Do you want to continue y/n? :n

Sum of the even numbers: 8

Sum of the odd numbers: 23

Press any key to continue . . .

**4. write a program to calculate HCF of two given number.**

/\* write a program to calculate HCF of two given number.\*/

import java.util.Scanner;

class HcfTwoNumbers

{

public static void main(String[] args)

{

Scanner sc = new Scanner(System.in);

int a,b,i,hcf=0;

System.out.print("Enter the first number is: ");

a = sc.nextInt();

System.out.print("Enter the second number is: ");

b = sc.nextInt();

for(i = 1; i<=a|| i<=b; i++)

{

if(a%i==0 && b%i==0)

{

hcf = i;

}

}

System.out.println("HCF = "+hcf);

}

}

/\*output: 12, 24

common factors 2,3,4,6,12

high common factor is 12

\*/

Output:

Enter the first number is: 12

Enter the second number is: 24

HCF = 12

Press any key to continue . . .