**Name –AasthaMalethaSAP Id - 1000014508 Sec-G**

1. **Armstrong Number**

Import java.util.Scanner;

public class ArmstrongNumber {

public static void main(String[] args) {

Scanner sc = new Scanner(System.in);

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

intnum = sc.nextInt();

int sum=0, n = num;

while (n!=0){

int t = n % 10;

sum = sum + (t\*t\*t);

n = n/10;

}

if (num == sum){

System.out.println("Number is Armstrong");

} else {

System.out.println("Number is not Armstrong");

}

}

1. **Reverse Number**

Import java.util.Scanner;

public class ReverseNumber {

public static void main(String[] args) {

Scanner sc = new Scanner(System.in);

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

intnum = sc.nextInt();

int rev=0, n= num;

while (n!=0){

int t = n%10;

rev = rev\*10+t;

n = n/10;

}

System.out.println("Original Number= "+num);

System.out.println("Reversed Number= "+rev);

}

}

1. **GCD/HCF/LCM**

Import java.util.Scanner;

public class Gcd\_LCM {

public static void main(String[] args) {

Scanner sc = new Scanner(System.in);

System.out.println("Enter 2 numbers: ");

int a = sc.nextInt();

int b = sc.nextInt();

int GCD=0;

if (a==0){

GCD = b;

} else if (b==0){

GCD = a;

}

for (inti = 1; i<= Math.min(a, b); i++) {

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

GCD=i;

}

}

System.out.println("GCD is "+ GCD);

//LCM

System.out.println("LCM is "+ ((a\*b)/GCD));

}

}

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public class Pattern1 {

public static void main(String[] args) {

intst=9, sp=0;

for (inti = 0; i< 5; i++) {

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

System.out.print(" ");

}

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

System.out.print("\*");

}

st = st-2;

sp = sp+1;

System.out.println();

}

}

}

Pattern

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public class Pattern2 {

public static void main(String[] args) {

for (inti= 0; i< 5; i++) {

if (i==0 || i==4){

for (int j = 0; j < 5; j++) {

System.out.print("\*");

}

System.out.println();

}

else

{

for (int j = 0; j < 5; j++) {

if (j==0||j==3){

System.out.print("\*");

}

else {

System.out.print(" ");

}

}

System.out.println();

}

}

}

}

Pattern

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public class Pattern3 {

public static void main(String[] args) {

for (inti = 1; i<= 5; i++) {

if (i==1 || i==5){

for (int j = 0; j < 7; j++) {

System.out.print("\*");

}

System.out.println();

}

else

{

for (int j = 0; j < 7; j++) {

if (j==0||j==6){

System.out.print("\*");

} else if (i==3&&j==3){

System.out.print("\*");

}

else {

System.out.print(" ");

}

}

System.out.println();

}

}

}

}

Pattern

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public class Pattern4 {

public static void main(String[] args) {

for (inti = 0; i< 5; i++) {

if (i%2==0){

for (int j = 0; j < 5; j++) {

if (j%2==0) {

System.out.print("1");

} else {

System.out.print("0");

}

}

System.out.println();

} else {

for (int j = 0; j < 5; j++) {

if (j%2==0) {

System.out.print("0");

} else {

System.out.print("1");

}

}

System.out.println();

}

}

}

}