**Logic Building Programs Solutions**

1. Check Positive Number: • Task: Create a flowchart to check whether a number is positive. • Next Step: Write a Java program that checks if a predefined number is positive using an if-else statement and prints the appropriate message.

class Positive {

public static void main(String[] args) {

int number = -1;

if(number>=0){

System.out.println("Your number is positive");

}else{

System.out.println("Your number is negative");

}

}

}

1. Check Negative Number: • Task: Create a flowchart to check whether a number is negative. • Next Step: Write a Java program that checks if a predefined number is negative using an if-else statement and displays the result.

class negative {

public static void main(String[] args) {

int number = -6;

if(number<0){

System.out.println("Your number is negative");

}else{

System.out.println("Your number is positive");

}

}

}

1. Check Odd or Even Number: • Task: Create a flowchart to determine whether a number is odd or even. • Next Step: Write a Java program that checks if a predefined number is odd or even. Use an if-else statement and the modulus operator (%) to determine whether the number is divisible by 2 or not.

class EvenOdd {

public static void main(String[] args) {

int number = 5;

if(number%2==0){

System.out.println("Your number is even");

}else{

System.out.println("Your number is odd");

}

}

}

1. Display Good Morning Message Based on Time: • Task: Create a flowchart to display a "Good Morning" message based on a given time. • Next Step: Write a Java program that displays a "Good Morning" message if the predefined time is between 5 AM and 12 PM. Use an if statement to implement the logic.

class time {

public static void main(String[] args) {

int time = 8;

System.out.println("It is calculating time from 5am to 12pm");

if((time>=4)||(time<=12)){

System.out.println("Good morning");

}else{

System.out.println("Good Evening");

}

}

}

1. Print Area of a Square: • Task: Create a flowchart to calculate and print the area of a square. • Next Step: Write a Java program that calculates the area of a square using the formula area = side \* side. Use a predefined side length.

class square {

public static void main(String[] args) {

int number = 4;

int result = number \* number;

System.out.println("Your square value is " + result);

}

}

1. Print Area of a Rectangle: • Task: Create a flowchart to calculate and print the area of a rectangle. • Next Step: Write a Java program that calculates the area of a rectangle using the formula area = length \* width. Use predefined values for length and width.

class Area {

public static void main(String[] args) {

int length = 10;

int breath = 20;

int area = length \* breath;

System.out.println("The area of rectangle " + area);

}

}

1. Find the Largest of Three Numbers: • Task: Create a flowchart to find the largest of three numbers. • Next Step: Write a Java program that finds and prints the largest of three predefined numbers using if-else statements.

class Largest {

public static void main(String[] args) {

int a = 20;

int b = 130;

int c = 40;

if((a>b)&&(a>c)){

System.out.println("A is greater " + a);

}else if (b>c){

System.out.println("B is greater " + b);

}else{

System.out.println("C is greater " + c);

}

}

}