Q1.

Code:

```java
package Q_01;

import java.util.Scanner;

public class Q_01 {
    public static void main(String[] args) {
        // Create a Scanner object
        Scanner scanner = new Scanner(System.in);

        //taking integer input 1
        System.out.print("Enter the first integer: ");
        int x = scanner.nextInt();
        //taking integer input 2
        System.out.print("Enter the second integer: ");
        int y = scanner.nextInt();
        //taking integer input 3
        System.out.print("Enter the third integer: ");
        int z = scanner.nextInt();

        int min; //smallest integer

        if(x < y) {
            if(x < z) {
                min = x; //x is the smallest
            } else {
                min = z; //z is the smallest
            }
        } else {
            if(y < z) {
                min = y; //y is the smallest
            } else {
                min = z; //z is the smallest
            }
        }

        // Print the smallest integer
        System.out.println("The smallest integer is: " + min);
    }
}
```

Output:

```
Enter the first integer: 7
Enter the second integer: 4
Enter the third integer: 10
The smallest integer is: 4

Process finished with exit code 0
```

Q2.

Code:

```java
package Q_02;

import java.util.Scanner;

public class Q_02 {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);
        System.out.println("0.Magenta");
        System.out.println("1.Cyan");
        System.out.println("2.Red");
        System.out.println("3.Blue");
        System.out.println("4.Green");
        System.out.println("Select a color from the above list: ");
        int seletion = scanner.nextInt();

        switch (seletion) {
            case 0:
                System.out.println("You selected Magenta");
                break;
            case 1:
                System.out.println("You selected Cyan");
                break;
            case 2:
                System.out.println("You selected Red");
                break;
            case 3:
                System.out.println("You selected Blue");
                break;
            case 4:
                System.out.println("You selected Green");
                break;
            default:
                System.out.println("Invalid selection");
                break;
        }
    }
}
```

Output:

```
0.Magenta
1.Cyan
2.Red
3.Blue
4.Green
Select a color from the above list:
1
You selected Cyan

Process finished with exit code 0
```

Q3.

Code:

```java
package Q_03;

import java.util.Scanner;

public class Q_03 {
    public static void main(String[] args) {
        // Create a Scanner object
        Scanner scanner = new Scanner(System.in);
        System.out.println("Enter the power of 10: ");
        //taking the power of 10 as input
        int power = scanner.nextInt();

        // Check the power and print the corresponding name
        switch (power) {
            case 6:
                System.out.println("10 to the power of 6 is: Million");
                break;
            case 9:
                System.out.println("10 to the power of 9 is: Billion");
                break;
            case 12:
                System.out.println("10 to the power of 12 is: Trillion");
                break;
            case 15:
                System.out.println("10 to the power of 15 is: Quadrillion");
                break;
            case 18:
                System.out.println("10 to the power of 18 is: Quintillion");
                break;
            case 21:
                System.out.println("10 to the power of 21 is: Sextillion");
                break;
            case 30:
                System.out.println("10 to the power of 30 is: Nonillion");
                break;
            case 100:
                System.out.println("10 to the power of 100 is: Googol");
                break;
            default:
                System.out.println("Invalid input");
                break;
        }
    }
}
```

Output:

```
Enter the power of 10:
15
10 to the power of 15 is: Quadrillion


Process finished with exit code 0
```

Q4.

Code:

```java
package Q_04;

import java.util.Scanner;

public class Q_04 {
    public static void main(String[] args) {
        // Create a Scanner object
        Scanner scanner = new Scanner(System.in);
        System.out.println("Enter the year: ");
        //taking the year as input
        int year = scanner.nextInt();
        // Check if year is divisible by 4 and not divisible by 100
        if (year%4 == 0 && year%100 != 0)
            System.out.println(year + " is a leap year");
        else
        {
            // Check if year is divisible by 4, 100 and 400
            if (year%4 == 0 && year%100 == 0 && year%400 == 0)
                System.out.println(year + " is a leap year");
            else
                System.out.println(year + " is not a leap year");
        }
    }
}
```

Output:

```
Enter the year:
1800
1800 is not a leap year


Process finished with exit code 0
```

Q5.

Code:

```
package Q_05;

import java.util.Scanner;

public class Q_05 {
    public static void main(String[] args) {
        // Create a Scanner object
        Scanner scanner = new Scanner(System.in);
        System.out.println("---Welcome to MyJava Lo-Fat Burgers---\n");
        System.out.println("\tMenu");
        System.out.println("1.Entree\n2.Side Dish\n3.Drink\n");
        System.out.println("Please choose one of the menu categories by entering
number.");
        //taking the menu item as input
        int menuItem = scanner.nextInt();
        // Create arrays for entree items
        String entree[]  = {"Tofu Burger","Cajun Chicken","Buffalo wings","Rainbow
Fillet"};
        // Create arrays for entree prices
        double entreePrice[] = {3.49,4.59,3.99,2.99};
        // Create arrays for side dish items
        String sideDish[] = {"Rice Cracker","No-Salt Fries","Zucchini","Brown Rice"};
        // Create arrays for side dish prices
        double sideDishPrice[] = {0.79,0.69,1.09,0.59};
        // Create arrays for drink items
        String drink[] = {"Cafe Mocha","Cafe Latte","Espresso","Oolong Tea"};
        // Create arrays for drink prices
        double drinkPrice[] = {1.99,1.90,2.49,0.99};
        int item;

        // Check the menu item and call the appropriate method
        switch (menuItem)
        {
            case 1:
                loop(entree,entreePrice);
                item = scanner.nextInt();
                output(entree,entreePrice,item);
                break;
            case 2:
                loop(sideDish,sideDishPrice);
                item = scanner.nextInt();
                output(sideDish,sideDishPrice,item);
                break;
            case 3:
                loop(drink,drinkPrice);
                item = scanner.nextInt();
                output(drink,drinkPrice,item);
                break;
            default:
                System.out.println("Invalid input");
                break;
        }
    }
    // This method displays the menu items and their prices
    public static void loop(String array[], double priceArray[])
    {
        for(int i = 0;i<4;i++)
```

```
        {
            System.out.println((i+1)+"."+array[i]+"\t\t$"+priceArray[i]);
        }
        System.out.println("\nEnter the number to add item to the order.");
    }
    // This method outputs the selected item and its price
    public static void output(String array[], double arrayPrice[], int x)
    {
        if(x > 0 && x < 5)
            System.out.println(array[x-1]+" added to the order. Total cost
$"+arrayPrice[x-1]);
        else
            System.out.println("Invalid selection");
    }
}
```

Output:

```
---Welcome to MyJava Lo-Fat Burgers---

    Menu
1.Entree
2.Side Dish
3.Drink

Please choose one of the menu categories by entering number.
2
1.Rice Cracker      $0.79
2.No-Salt Fries     $0.69
3.Zucchini      $1.09
4.Brown Rice        $0.59

Enter the number to add item to the order.
3
Zucchini added to the order. Total cost $1.09

Process finished with exit code 0
```