

# Lab worksheet 4: Selection Statements

CT/2021/015-N.P.wijewardhana.

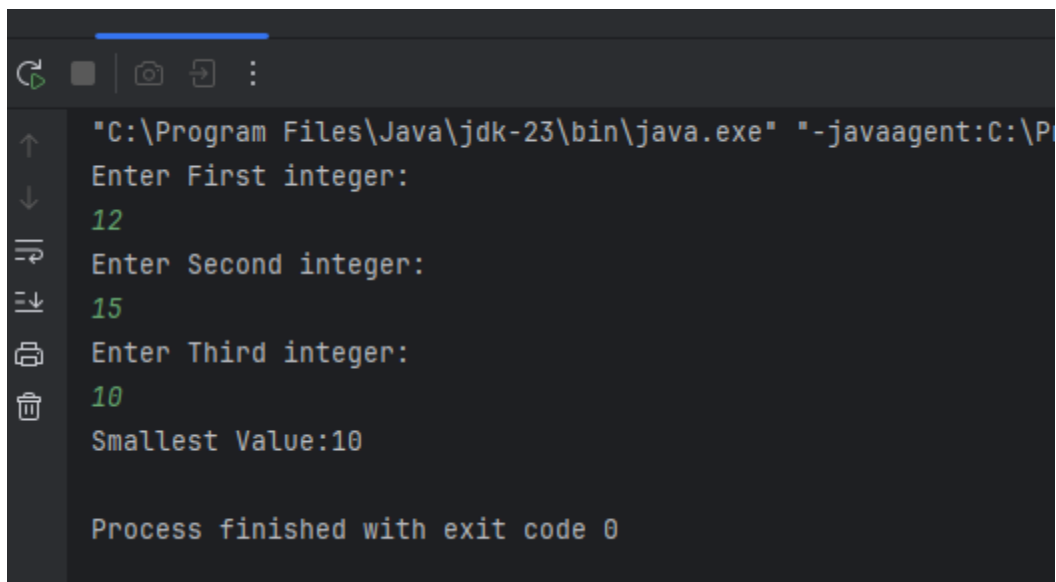
01)Code:

```
package Q01;
import java.util.Scanner;
public class Q01 {
    public static void main(String[] args) {
        Scanner scan =new Scanner(System.in);
        System.out.println("Enter First integer:");
        int num1= scan.nextInt();
        System.out.println("Enter Second integer:");
        int num2= scan.nextInt();
        System.out.println("Enter Third integer:");
        int num3= scan.nextInt();

        int smallest=num1;
        if (num2<smallest){
            smallest=num2;
        }
        if (num3<smallest){
            smallest=num3;
        }

        System.out.println("Smallest Value:"+smallest);
    }
}
```

Output:



```
"C:\Program Files\Java\jdk-23\bin\java.exe" "-javaagent:C:\P
Enter First integer:
12
Enter Second integer:
15
Enter Third integer:
10
Smallest Value:10

Process finished with exit code 0
```

02)Code:

```
package Q02;
import java.util.Scanner;

public class Q02 {
    public static void main(String[] args) {
        Scanner scan = new Scanner(System.in);
        System.out.println("Enter a num between(0-4):");
        int number=scan.nextInt();
        String color;
        switch (number){
            case 0:
                color="Magenta";
                break;
            case 1:
                color="Cyan";
                break;
            case 2:
                color="Red";
                break;
            case 3:
                color="Blue";
                break;
            case 4:
                color="Green";
                break;
            default:
                color=null;
                break;
        }

        if(color==null){
            System.out.println("Invalid Selection");
        }
        else{
            System.out.println("You are selected:"+color);
        }
    }
}
```

Output:



```
Run Q02 x
"\"C:\Program Files\Java\jdk-23\bin\java.exe\" \"-javaagent:C:\Program Files\Jetl
Enter a num between(0-4):
3
You are selected:Blue
Process finished with exit code 0
|
```

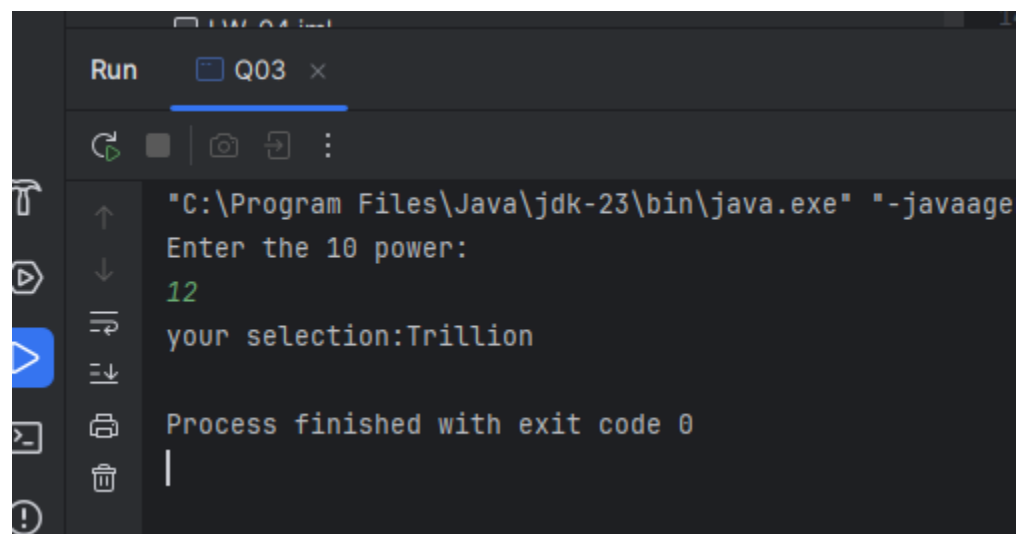
03)Cade:

```
package Q03;
import java.util.Scanner;
public class Q03 {
    public static void main(String[] args) {
        Scanner scan = new Scanner(System.in);
        System.out.println("Enter the 10 power:");
        int power= scan.nextInt();
        String message;

        switch (power){
            case 6:
                message="Million";
                break;
            case 9:
                message="Billion";
                break;
            case 12:
                message="Trillion";
                break;
            case 15:
                message="Quadrillion";
                break;
            case 18:
                message="Quintillion";
                break;
            case 21:
                message="Sextillion";
                break;
            case 30:
                message="Nonillion";
                break;
            case 100:
                message="Googol";
                break;
```

```
        default:
            message=null;
            break;
    }
    if(message==null){
        System.out.println("Invalid value");
    }
    else {
        System.out.println("your selection:"+message);
    }
}
```

Output:

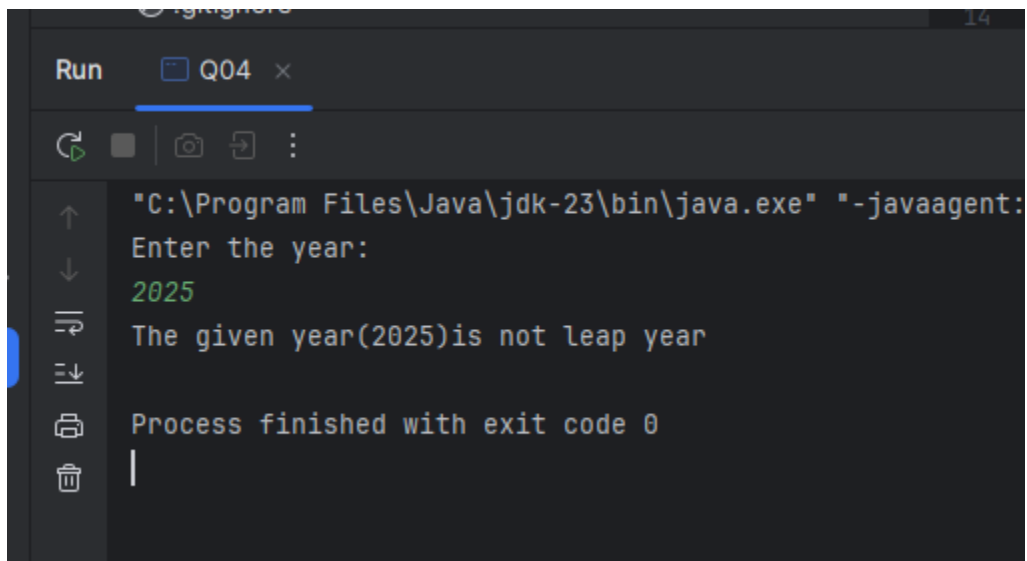


```
Run Q03 x
"C:\Program Files\Java\jdk-23\bin\java.exe" "-javaage
Enter the 10 power:
12
your selection:Trillion
Process finished with exit code 0
|
```

04)Code:

```
package Q04;
import java.util.Scanner;
public class Q04 {
    public static void main(String[] args) {
        Scanner scan = new Scanner(System.in);
        System.out.println("Enter the year:");
        int year= scan.nextInt();
        boolean isLeapYear=false;
        if(year%4==0){
            if(year%400==0||year%100!=0){
                isLeapYear=true;
            }
        }
        if(isLeapYear){
            System.out.println("The given year("+year+")"+"is leap year");
        }
        else{
            System.out.println("The given year("+year+")"+"is not leap
year");
        }
    }
}
```

Output:

The screenshot shows the 'Run' console of an IDE. At the top, there's a tab labeled 'Run' with a sub-tab 'Q04'. Below the tab, there are icons for running, debugging, and other actions. The main area of the console displays the following text:   
1. The command to run the program: `"C:\Program Files\Java\jdk-23\bin\java.exe" "-javaagent:`  
2. The prompt `Enter the year:` followed by the user input `2025` in green text.  
3. The output of the program: `The given year(2025)is not leap year`.  
4. The final status: `Process finished with exit code 0`.  
On the left side of the console, there are icons for navigating through the output, including up/down arrows, a search icon, and a refresh icon.

05)Code:

```
package Q05;
import java.util.Scanner;
public class Q05 {
    public static void main(String[] args) {
        Scanner scan = new Scanner(System.in);
        System.out.println("Entree(Enter a num between(1-4)):");
        int entree= scan.nextInt();
        String chooseA;

        System.out.println("Side Dish(Enter a num between(1-4)):");
        int sideDish= scan.nextInt();
        String chooseB;

        System.out.println("Drink(Enter a num between(1-4)):");
        int drink= scan.nextInt();
        String chooseC;

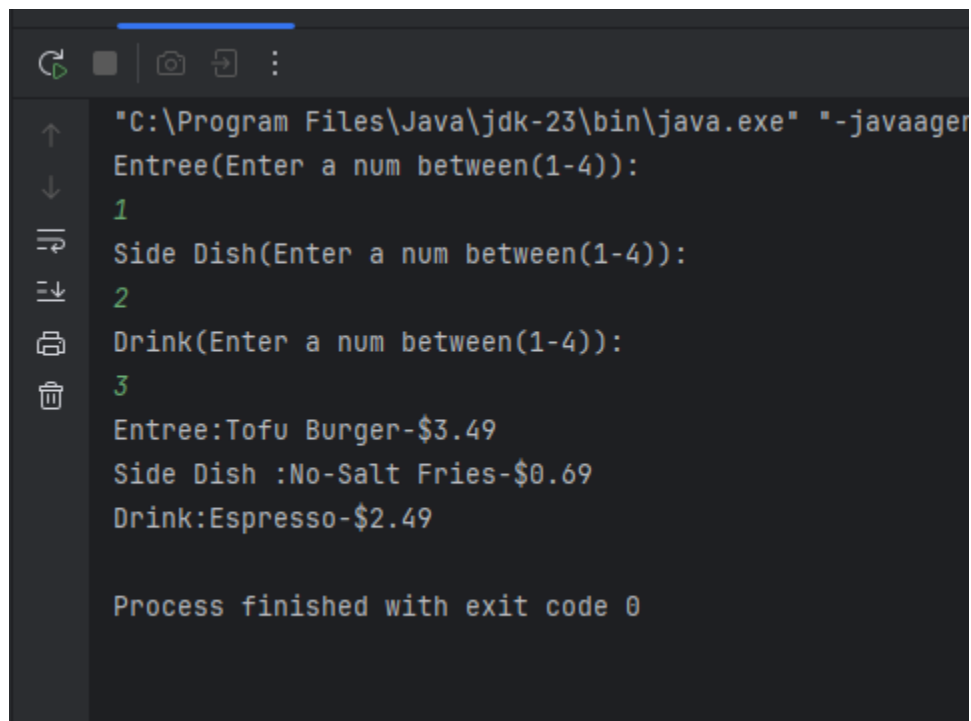
        switch (entree){
            case 1:
                chooseA="Tofu Burger-$3.49";
                break;
            case 2:
                chooseA="Cajun Chicken-$4.59";
                break;
            case 3:
                chooseA="Buffalo Wings-$3.99";
                break;
            case 4:
                chooseA="Rainbow Fillet-$2.99";
                break;
            default:
                chooseA=null;
                break;
        }
        switch (sideDish){
            case 1:
                chooseB="Rice Cracker-$0.79";
                break;
            case 2:
                chooseB="No-Salt Fries-$0.69";
                break;
            case 3:
                chooseB="Zucchini-$1.09";
                break;
            case 4:
                chooseB=" Brown Rice-$0.59";
                break;
            default:
                chooseB=null;
                break;
        }
    }
}
```

```

        switch(drink) {
            case 1:
                chooseC="Cafe Mocha-$1.99";
                break;
            case 2:
                chooseC="Cafe Latte-$1.90";
                break;
            case 3:
                chooseC="Espresso-$2.49";
                break;
            case 4:
                chooseC=" Oolong Tea-$0.99";
                break;
            default:
                chooseC=null;
                break;
        }
        System.out.println("Entree:"+chooseA);
        System.out.println("Side Dish :"+chooseB);
        System.out.println("Drink:"+chooseC);
    }
}

```

Output:



```

"C:\Program Files\Java\jdk-23\bin\java.exe" "-javaagent
Entree(Enter a num between(1-4)):
1
Side Dish(Enter a num between(1-4)):
2
Drink(Enter a num between(1-4)):
3
Entree:Tofu Burger-$3.49
Side Dish :No-Salt Fries-$0.69
Drink:Espresso-$2.49

Process finished with exit code 0

```