**Report writing in java**

**Introduction**

If then else loop, for loop and do while loop was taught in this session. Students learnt to perform programming using different loops during this session.

**If then else**

Syntax: if (test condition) {

Statements or actions to perform if the test is positive.

}

Else {

Statement or action to perform if the test is negative.

}

**For loop**

Syntax: for (initialization; Boolean expression; update) {

Statements or actions to perform.

}

While loop

Syntax: while (test condition) {

Statements or actions to perform.

}

**Do-while loop**

Syntax: do {

Actions to perform.

} while (test condition)

Switch

Syntax: switch(x) {

Case 1: Statements; break;

Case 2: Statements; break;

**Explanation**

**Exercise 1 (Do while)**

The scanner class is imported at first

And then class is declared as E1.

After that method loop is declared.

New scan object has been created in scanner.

Declaring the variable outside the loop.

Looping statement is written.

The statements are written.

Nested loop is created.

Reading data from the console

The entered value is compared with “y” or “n”.

If the condition is satisfied the nested loop is terminated.

Else the nested loop is repeated.

Checking condition for the nested loop is given.

Checking for the loop is given.

Scan sequence is closed.

Main method is declared.

New object is created and initialized.

Finally, loop method is invoked at last.

**Exercise 2 (Rectangle class)**

The scanner class is imported at first.

And then class is declared as Rectangle.

After that method is declared.

Global variable details (length and width) are

Assigned to the value of local variable.

Method is declared.

After that main method is declared.

New object is created in scanner.

Conformation value is assigned to the variable.

New object is created and initialized at last.

Variable is assigned to the value after

Calling the function.

Data is read from the console.

Checks the value and decides to continue or not.

**Exercise 3 (what day is it?)**

Scanner class is imported.

Class is declared as E3.

Method switchmethod is declared.

Switch is started.

Case 1 is declared.

Command to print “Today is Monday.” is written.

Case 2 is declared.

Command to print “Today is Tuesday.” is written.

Case 3 is declared.

Command to print “Today is Wednesday.” is written.

Case 4 is declared.

Command to print “Today is Thursday.” is written.

Case 5 is declared.

Command to print “Today is Friday.” is written.

Case 6 is declared.

Command to print “Today is Saturday.” is written.

Case 7 is declared.

Command to print “Today is Sunday.” is written.

Main method is declared.

Variable num of integer data type is declared.

New object is created in scanner.

Do while loop is initialized.

Data is read from console.

The entered integer is checked if it equals to 1 to 7 or not.

If the condition is satisfied the loop is terminated there.

Else the user is asked to re-enter the correct value.

The checking condition for the loop is given.

Read sequence is closed.

New object e is created and initialized.

Method switchmethod is invoked.

**Critical evaluation**

**In exercise 1,** the program is performed using if else loop. The nested loop can be created in another method and can be called from between the loops.

If-condition can also be created in another method and can be called.

Doing this method I faced many problems at first using loops was really confusing.

But at last after few time explanation everything was understood well.

And the activity was performed without any challenges.

**In exercise 2,** the program is performed using do while loop.

Scanner class was imported at first

Method was declared and loop was run.

Function was called at last.

After that conformation was taken from the user.

I felt do while loop harder than first one doing this activity.

**In exercise 3,** the scanner object can be created in any other method

And the object was invoked during the execution.

The do-loop can be created in another method and be invoked.

Different cases were used to execute the days of the week.

At last coding was vast but the program was very easy to understand.

**Conclusion**

While doing this assignment we learnt to perform the programming

Related to different loops (if-else, do while) and so on. We learnt

To use the variables properly. We also learnt to use the case and display

The output according to the criteria.

Doing this activity was so much effective and coding was really fun.

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