Object-Oriented Programming (CS F213)

Lab session-9

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Practice Problem-1

Create a Frame and add a button. When button is clicked a rectangle (200X80) should be drawn on the screen.

Objective: to demonstrate how to use Graphics.

Practice Problem-2

1) Define a user defined Java Exception class *InvalidArgumentException* which is a checked exception class and used to indicate exception condition if the commandline argument is equal to "NO". Write class ***Demo*** that has *public static void main()*, and accepts some commandline arguments and prints the commandline arguments one by one. If the argument is equal to "NO", then throws an exception of type *InvalidArgumentException* (which you have defined). If the object reference of type *InvalidArgumentException* is *e*, in catch block when we print the exception object reference using *System.out.println(e)*, it must print it as- "Exception: Code: 333: Invalid Argument Exception:", and proceed to next argument. If no exception, the program should print- "Argument < argument > is valid". The last statement in *main()* is "Last in main:". Example: If we execute ***Demo*** class with commandline arguments as below-

   For C:>java Demo Hi good hello NO world

output should be

Argument Hi is valid
Argument good is valid
Argument hello is valid
Exception: Code: 333: Invalid Argument Exception
Argument world is valid
Last in main:

Practice Problem-3

// To get the reference to the current thread

Practice Problem-4

// creating thread by implementing Runnable interface

Practice Problem-5

// Multithread Program to run main plus three user defined threads concurrently by extending Thread class

Exercise :

Write a multithread program with two threads other than Main thread.
First child will print numbers 1-26 with 1 sec sleep between printing two numbers.
Second Thread will print A – Z with 1 sec sleep between printing two alphabets.
Create these two threads in Main thread and run.
That is, the out will be:
1
A
2
B
3
C … and so on…..

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