**EXPERIMENT N0-6**

**Write a program to implement solution of Producer consumer problem**

**CODE:**

package com.harsh;

public class ProCon {

public static void main(String[] args) {

CubbyHole c = new CubbyHole();

Producer p1 = new Producer(c, 1);

Consumer c1 = new Consumer(c, 1);

p1.start();

c1.start();

}

}

class CubbyHole {

private int contents;

private boolean available = false;

public synchronized int get() {

while (available == false) {

try {

wait();

} catch (InterruptedException e) {}

}

available = false;

notifyAll();

return contents;

}

public synchronized void put(int value) {

while (available == true) {

try {

wait();

} catch (InterruptedException e) { }

}

contents = value;

available = true;

notifyAll();

}

}

class Consumer extends Thread {

private CubbyHole cubbyhole;

private int number;

public Consumer(CubbyHole c, int number) {

cubbyhole = c;

this.number = number;

}

public void run() {

int value = 0;

for (int i = 1; i < 10; i++) {

value = cubbyhole.get();

System.out.println("Consumer consumes - " + value);

}

}

}

class Producer extends Thread {

private CubbyHole cubbyhole;

private int number;

public Producer(CubbyHole c, int number) {

cubbyhole = c;

this.number = number;

}

public void run() {

for (int i = 1; i < 10; i++) {

cubbyhole.put(i);

System.out.println("Producer produces - " + i);

try {

sleep((int)(Math.random() \* 100));

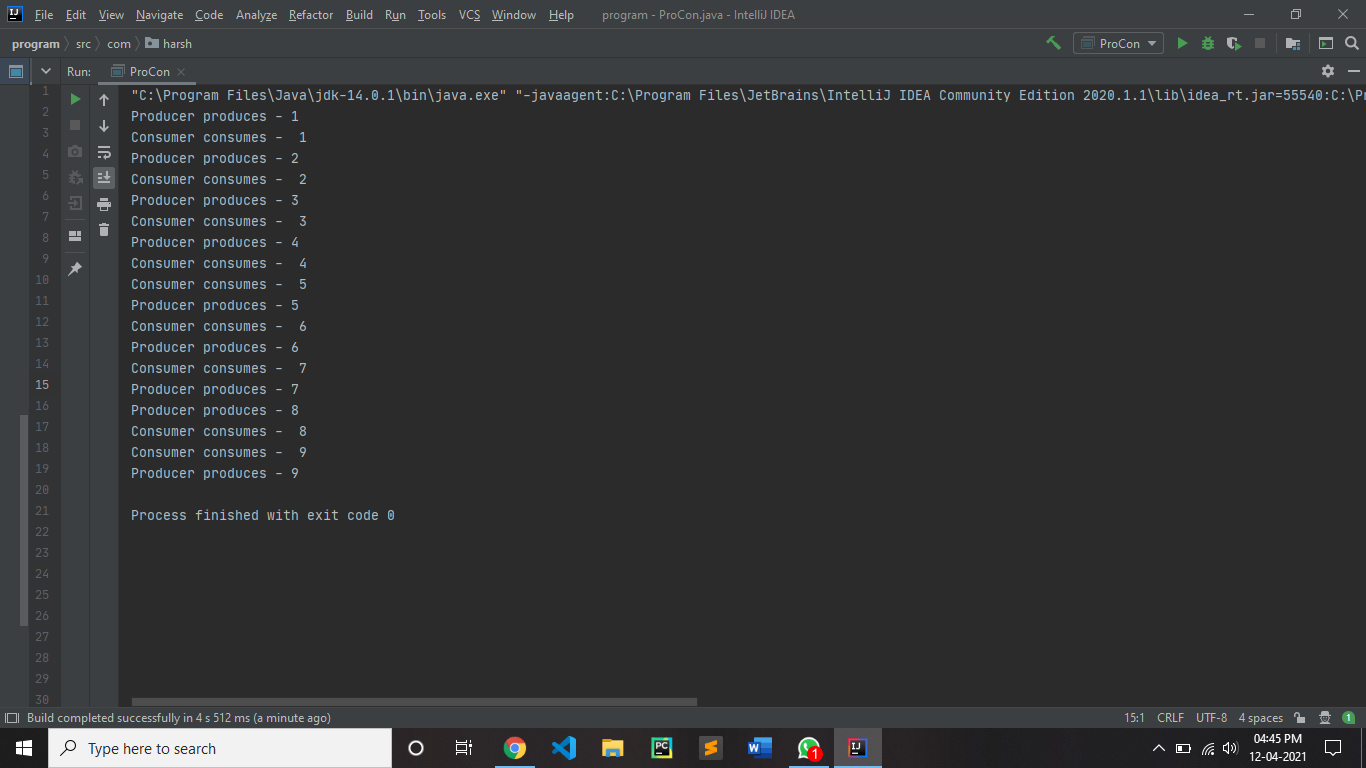
} catch (InterruptedException e) { }

}

}

}

**OUTPUT:**

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