CS 1301

Name:

Exam2

40pts

1. What is the output of the following code? (1.5 points)

int x = 0;

if (x < 4) {

x = x + 1;

}

System.out.println("x is " + x);

a. x is 0

b. x is 1

c. x is 2

d. x is 3

e. x is 4

1. Suppose income is 4001, what is the output of the following code? (1.5 points)

if (income > 3000) {

System.out.println("Income is greater than 3000");

}

else if (income > 4000) {

System.out.println("Income is greater than 4000");

}

a. no output

b. Income is greater than 3000

c. Income is greater than 3000 followed by Income is greater than 4000

d. Income is greater than 4000

e. Income is greater than 4000 followed by Income is greater than 3000

1. What output is produced by the following code fragment? (4 points)

String s1 = "VSU Computer Science";

String s2;

int size = s1.length();

System.out.println (size);

System.out.println (s1.charAt(4));

s2 = s1.substring (4, 12);

System.out.println (s2);

System.out.println(s1.toUpperCase());

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C

Computer

VSU COMPUTER SCIENCE

1. Analyze the following code: (1.5 points)

boolean even = false;

if (even = true) {

System.out.println("It is even");

}

a. The program has a compile error.

b. The program has a runtime error.

c. The program runs fine, but displays nothing.

d. The program runs fine and displays It is even.

1. What is y after the following switch statement is executed? (1.5 points)

int x = 3; int y = 4;

switch (x + 3) {

case 6: y = 0;

case 7: y = 1;

default: y += 1;

}

a. 1

b. 2

c. 3

d. 4

e. 0

6. Which of the following code displays the area of a circle if the radius is positive? (1.5 points)

A) if (radius > 0) System.out.println(radius \* radius \* 3.14159);

B) if (radius != 0) System.out.println(radius \* radius \* 3.14159);

C) if (radius >= 0) System.out.println(radius \* radius \* 3.14159);

D) if (radius <= 0) System.out.println(radius \* radius \* 3.14159);

7. Which of the following would return the last character of the String x? (1.5 points)

a. x.charAt(0);

b. x.charAt(last);

c. x.charAt(length(x));

d. x.charAt(x.length( )-1);

e. x.charAt(x.length( ));

8. To obtain the sine of 35 degrees, use \_\_\_\_\_\_\_. (1.5 points)

a. Math.sin(35)

b. Math.sin(Math.toRadians(35))

c. Math.sin(Math.toDegrees(35))

d. Math.sin(Math.toRadian(35))

e. Math.sin(Math.toDegree(35))

1. What will be the output of the following Java methods: (2 points)
2. Math.rint(2.5) // 2
3. Math.round(2.5) // 3
4. Math.floor(-6.1) // -7
5. Math.abs(-2.1) // 2.1

10. The Unicode of 'a' is 97. What is the Unicode for 'c'? (1.5 points)

a. 96

b. 97

c. 98

d. 99

11. If you want to output the text "hi there", including the quote marks, which of the following could do that? (1.5 points)

a. System.out.println("hi there");

b. System.out.println(""hi there"");

c. System.out.println("\"hi there");

d. System.out.println("\"hi there\"");

e. none, it is not possible to output a quote mark because it is used to mark the beginning and ending of the String to be output

12. public class Ch4\_16 (3 points)

{

public static void main(String [] args)

{

String s = "hello";

String s\_2 = "hello";

String s\_3 = s;

System.out.println(s == s\_2); // what is the output

System.out.println(s == s\_3); // what is the output

}

}

What is the outputs of the program?

true/false

true

13. The statement System.out.printf("%3.1f", 1234.56) outputs \_\_\_\_\_\_\_\_\_\_\_. (1.5 points)

a. 123.4

b. 123.5

c. 1234.5

d. 1234.56

e. 1234.6

14. We know Sunday is the 1st day of a week, Monday is the 2nd day of a week, and so on, write a Java Program, read an integer number (1 - 7), print out which day it is, e.g., enter "4", output should be "Wednesday". (8 points)

import java.util.Scanner;

public class E3\_8

{

public static void main(String [] args)

{

Scanner input = new Scanner(System.in);

System.out.print("Enter an integer number representing week date (1-7): ");

int day = input.nextInt();

switch(day)

{

case 1: System.out.println("Sunday");

break;

case 2: System.out.println("Monday");

break;

case 3: System.out.println("Tuesday");

break;

case 4: System.out.println("Wednesday");

break;

case 5: System.out.println("Thursday");

break;

case 6: System.out.println("Friday");

break;

case 7: System.out.println("Saturday");

break;

default: System.out.println("The day should be a number from 1 to 7 ...");

}

}

}

15. Read a file name from the keyboard, check if the file is a ".java" file, if yes, check if the file name is "Hello.java". (8 points)

import java.util.Scanner;

public class E19

{

public static void main(String [] args)

{

Scanner input = new Scanner(System.in);

String fileName = input.nextLine();

if(fileName.endsWith(".java"))

{

System.out.println("Your file is a java file ...");

if(fileName.equals("Hello.java"))

System.out.println("You entered Hello.java file ...");

}

}

}