For each question 1 - 10, what will be printed?

1)

for (int i = 10; i > 0; i--){

if (i%2==1)

System.out.print(i);

}

2)

for (int i = 0; i < 20; i+=4){

System.out.print(i);

}

3)

for (int i = 10; i <=20; i++){

if (i%2==0)

System.out.print(i);

if (i%7==0)

System.out.print(i);

}

4)

String team = "Trojans";

for (int i = team.length() - 1; i >= 0; i--)

System.out.print(team.substring(i,i+1));

5)

String word = "Flyers";

String letter = "";

for (int i = 0; i < word.length(); i++){

letter = word.substring(i, i+1);

if (letter.equals("s") || letter.equals("y") || letter.equals("e"))

System.out.print(letter);

}

6)

int max = 10, min = 0;

while (max > min){

if (max > 5)

max -= 3;

min += 3;

}

System.out.println(max);

7)

int something = 0;

for (int i = 1; i <= 5; i++){

something += i;

}

System.out.println(something);

8)

int sum = 0;

for (int i = 1; i < 4; i++)

for (int j = 1; j < 4; j++){

sum = i + j;

}

System.out.println(sum);

9)

String school = "";

boolean done = false;

while (!done){

if (school.equals("")){

school += "Uni";

} else if (school.equals("Uni"))

school += "versity ";

else if ( school.equals("University ")) {

school += "High School";

}

else

done = true;

}

System.out.println(school);

10)

String foo = "";

for (int i = 1; i < 4; i++){

for (int j = 1; j <= i; j++)

foo += "$";

System.out.println(foo);

}

11) What is printed by the method call mystery1(10,8)? How about mystery1(8,10)?

public static void mystery1(int j, int k){

for(int i = j%k; i < j + k; i++){

j++;

k--;

i+=(i%(k-j));

}

System.out.println("j = " + j + " & k = " + k);

}

12) What is returned by the method call mystery2(“placement”)? Describe in words what this method does.

public static String mystery2(String str) {

String result = "";

for (int i=0; i<str.length(); i+=2) {

result = result + str.substring(i, i+1);

}

return result;

}

13) What is returned by the method call mystery3(“call”)? Describe in words what this method does.

public static String mystery3(String str) {

String result = "";

for (int i=0; i<str.length(); i++) {

result = result + str.substring(0, i+1);

}

return result;

}

14) What is returned by the method call mystery4(“Hello Billy, Bobby, Susan, and Carly!”, “y”)? Describe in words what the method does.

public static int mystery4(String words, String character) {

words = words.toLowerCase();

character = character.toLowerCase();

int count = 0;

for (int i = 1; i < words.length() + 1; i++){

String sub = words.substring(i);

int index = sub.indexOf(character);

if (index > -1){

if (index == sub.length()-1 || index + 1 < sub.length() && (sub.substring(index + 1, index + 2).compareTo("a")<0 || sub.substring(index + 1, index + 2).compareTo("z")>0 )){

count++;

}

i += index;

}

else{

i = words.length();

}

}

return count;

}

15) What is printed by the method call mystery5()?

static void mystery5(){

for (int i = 1; i <= 7; i++) {

for (int j = 1; j <= i; j++)

System.out.print(j);

for (int k = 7 - i; k >= 1; k--)

System.out.print("\*");

System.out.println("");

}

}

16) What is returned by the method call mystery3(1234321, 2)? Describe in words what this method does.

public static boolean mystery3(int number, int digit) {

if (number == digit){

return true;

}

while (number > 0){

if (number%10==digit){

return true;

}

number/=10;

}

return false;

}