**Midterm Exam: Java Programming**

**WEP2020**

**{2h}**

29th November 2019

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| --- | --- | --- |
| **Q&A** |  | **50** |
| **Lab** |  | **50** |
| **Total** |  | **100** |

1. **Q&A {50pts}**
2. What is the output of the following code?

int i = 0;

i = i++ + i;

System.out.println("i=" +i);

Answer: i=1

1. What is the output of the following code?

int i = 0;

i = ++i + i;

System.out.println("i=" +i);

Answer: i=2

1. What is the output of the following code?

int[] age = new int[5];

age[0]=90;

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

System.out.print(age[i]+" ");

}

Answer: 90 0 0 0 0

1. What is the output of the following code?

int i = 0;

while(i>5) {

System.out.println("Happy Exam Day!");

}

i++;

Answer: nothing

1. We have an array as below

int[] negativeNumber = new int[20];

Write statement(s) to assign value **-1** to all elements of this array.

Answer: Arrays.fill(negativeNumber,-1); // they could use loop

1. Fill the output in the table

int[][] matrix = new int[3][3];

int i,j;

for(i=0;i<3;i++){

for(j=0;j<3;j++){

matrix [i][j] = i+3\*j;

}

}

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Col0** | **Col1** | **Col2** |
| **Row0** | 0 | 3 | 6 |
| **Row1** | 1 | 4 | 7 |
| **Row2** | 2 | 5 | 8 |

1. We have the following code with error.

**boolean** isTrue;

isTrue = "true";

Could you tell what is the problem? And try to give the solution to this problem.

Answer: change Boolean to String or just delete double quote from true

1. We have the following code with error.

**char** letter = "c";

Could you tell what is the problem? And try to give the solution to this problem.

Answer: change char to String or just change double quote to single quote

1. We want to output the word “Awesome WEP2020” 5 times in the console.

We have the following code.

int i = 1;

do {

System.out.println("Awesome WEP2020");

i++;

}while(i<5);

Do you think this code will output “Awesome WEP2020” 5 time in the console? Why or Why not?

Answer: change i=0 or change condition i<=5

1. We have array of 5 elements with the code below

String[] names = {"Rith","Rady","Ronan","Seyha","Channak"};

Write code to output all the name start from Channak to Rith

Answer: loop

1. **Lab {50pts}**

An array 15 integers is given with random number between -5 and 5. Please refer to the source code in google classroom and write java programming to solve the problem below.

1. Find the largest number in this array
2. Find the smallest number in this array
3. Display the result of this Boolean assertion : “all numbers greater than zero”
4. Display the result of this Boolean assertion : “at least one number greater than zero”
5. Display how many numbers greater than zero or even appears in this arrays