NOMBRE		ETAPA / CICLO	CURSO
		CFGS DAW/DAM	1º
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		PROGRAMACION	CONTINUA
DNI	FECHA	NOTA	
	18/10/2022		

1. (2p)
   a. Transform the following code into an if-else to perform the same action.

```
public static void main(String[] args) {
   int numero = 2;
   switch (numero) {
      case 0:
      case 1:
         System.out.println("Hola");
      case 2:
         System.out.println("Adios");
         break;
      case 3:
         System.out.println("Mi nombre");
         break;
      case 4:
         System.out.println(" es Joaquin");
         break;
      default:
         System.out.println("Error, soy Xavier");
   }
}
```

   b. Transform the following code into a do-while in order to perform the same action.

```
public static void main(String[] args) {
   for(int i=0,j=10;i<10;i++,j-=2){
      System.out.println(i + " " + j);
   }
}
```

2. (2p) Indicate if the following codes compile and fix it if necessary to get the expected output. Only the right side of the assignment and the println method can be modified, using castings and conversion between Strings and numbers.

a.

CODE	`int num = 'A' + 1.4;` `System.out.println(num);`	Compile ☐ yes ☐ no
Fix the code if it necessary		
OUTPUT	B	

b.

CODE	`float num = "23.5" + 1;` `System.out.println(num + 333);`	Compile ☐ yes ☐ no
Fix the code if it necessary		
OUTPUT	24.5333	

c.

CODE	`System.out.println('1' + '-' + '3');`	Compile ☐ yes ☐ no
Fix the code if it necessary		
OUTPUT	1-3	

d.

CODE	`float num1 = 2.5f;`
	`double num2 = num1 + 3;`
	`System.out.println(num2);`
		Compile ☐ yes ☐ no

Fix the code if it necessary		
OUTPUT	5.5	

e.

CODE	`double num = 1.5f + 1.5d;`
	`int num2 = "3" + num;`
	`System.out.println(num2);`
		Compile ☐ yes ☐ no

Fix the code if it necessary		
OUTPUT	6	

3. (2p) Create a program that prompts for a phrase and shows whether it is a palindrome. Blank spaces should not be taken into consideration.

Enter a phrase

hol a aloh

The phrase is a palindrome.

4. (2p) Create a function that, from a number, creates the identity matrix.
Enter a number: 5

```
1 0 0 0 0
0 2 0 0 0
0 0 3 0 0
0 0 0 4 0
0 0 0 0 5
```

(2p) **CHOOSE ONE OF THE FOLLOWING EXERCICES (JUST ONE, EITHER 5 OR 6):**

5. Create a function for asking for a phrase, and two integer numbers (upper limit and lower limit). This function must return a substring between the two integers. If you enter a number less than 0 in the lower limit, it will be equal to zero. In case the top number is greater than the length of the String minus one, it must be equal to this length. In case the lower index was greater than the upper one, it should return an empty string. **You can only use the charAt() and length() functions of the String class.**

   Enter a phrase:

   Hola como estas

   Enter a lower limit:

   2

   Enter a upper limit:

   11

   The substring is: la como es

6. Create a function that receives a phrase, a word to replace, and the word that is going to replace the previous one. The function must return the phrase modified. **For the resolution of the exercise, you can only use the charAt() and length() functions of the String class**

   Enter a phrase:

   Luis, me oyes? Luis!, luis!. Estas sordo luis!!!

   Enter a word:

   Luis

   Enter a Word:

   Carlos

   Resultado:

   Carlos, me oyes? Carlos!, Carlos!. Estas sordo Carlos!!!