ACÁ VA EL NOMBRE DEL DOCUMENTO

Acá puede ir una descripción breve o información adicional sobre el documento.

El futuro digital es de todos

MinTIC

Worksheet 8.1

Match parts of the sentences from the three columns to make logical statements.

1. If you like fast food,	a. then take sunglasses,	i. else study something else.
2. If you like felines,	b. then study programming,	ii. else get a dog.
3. If you have a facemask,	c. then go to McDonald´s,	iii. else take an umbrella.
4. If you are good at Mathematics,	d. then get a cat,	iv. else stay at home.
5. If it is sunny,	e. then you can go outside,	v. else eat vegetables.

WORKSHEET 8.2

A. Unscramble the letters and write the word.

1.Esel

2.Svedice

3.Loxpmce

4.Sceioch

5.arlvese

6.htob

7.altseat

8.kechc

9.widarhtw

10.MTA

B. Complete the sentences using the words in exercise A.

1. The wolf and fox are _____ wild animals.
2. The company has a _____ organizational structure.
3. My mom gives the cards to someone _____
4. But now there are two _____ for us
5. _____ of the students have taken the exam.
6. Clean and rinse your hair _____twice a week.
7. I _____ my emails every day.
8. Laura _____some money from the _____
9. But now there are two _____ for us
10. I buy a new computer _____

WORKSHEET 8.3

Reading text

Conditionals and how they are used in Algorithms

A CONDITIONAL is a type of a step in an algorithm where a decision must be made. In this article, we will focus on two types of CONDITIONALS: ***IF-THEN-ELSE*** and ***AND/OR*** conditionals.

IF-THEN-ELSE CONDITIONALS

One of the first things that programmers learn is how to use IF-THEN-ELSE conditionals. The basic idea is: ***IF*** some condition is true ***THEN*** do this, ***ELSE*** do that.

For example, imagine you have to connect to an online class, and you have two **devices**: a computer and a cellphone. You prefer to use the computer, but your computer is sometimes blocked. So the CONDIIONAL for your situation is: ***IF*** the computer works well ***THEN*** connect with the computer, ***ELSE*** connect with the cellphone.

Sometimes, you can have **complex** conditional statements when you have more than two **choices**. As humans, make decisions with **several** options in a very different way than computers. We have the ability to select one item out of a group of choices, but a computer program has to make binary decisions, meaning that it can only select between two things at a time.

Imagine you want to go to a restaurant. You top-favorite is a pizza restaurant, your second favorite is a hot-dog restaurant, and your third favorite is a burger restaurant. There are no more restaurants in your town. Your CONDITIONAL for this situation is:

- ***IF*** pizza restaurant is open,
    - ***THEN*** go to pizza restaurant
- ***IF*** hot-dog restaurant is open,
    - ***THEN*** go to hot-dog restaurant
- ***IF*** burger restaurant is open,
    - ***THEN*** go to burger restaurant
- ***ELSE*** cook at home

All the options after the one that is selected are completely ignored. For example, if the pizza restaurant is open, the computer program will ignore hot-dog and burger restaurants. When writing your program, it is important to think about the priorities.

AND/OR CONDITIONALS

If you want to **check** multiple conditions, you can use AND/OR statements. Using AND will cause the program to do something if **both** conditions are true. Using an OR statement will do something if one of the conditions is true.

imagen de un niño/niña jugando futbol, otra – sacando un perro, otra – estudiando

Imagine you want to go to play soccer, but your mother says that you should do homework and walk the dog first. For this situation, the CONDITIONAL is: ***IF*** I finished homework ***AND*** I walked the dog, ***THEN*** I go to play soccer, ***ELSE*** I stay at home. Now, imagine a different situation – you want to participate in a school competition in Mathematics; to participate, you have to study minimum in the 9th grade or you have to be minimum 15 years old. In this case, the CONDITIONAL is: ***IF*** I study in 9th grade or higher ***OR*** I am **at least** 15 years old, ***THEN*** I can participate in Mathematics competition, ***ELSE*** I cannot participate.

WORKSHEET 8.4

EVALUATION

Write a CONDITIONAL for each situation using the programming language you learned today: IF, THEN, ELSE, AND, OR.

1. Your flight is at 5 pm. You have to be at the airport at least 1 hour before. You get to the airport on time, you take the flight. You don´t get to the airport on time, you buy a new ticket.

2. You want to withdraw 10 000 pesos from the ATM. You have 10 000 or more in your account, you get the money. You have less than 10 000 in your account, you get nothing.

3. You want to take salsa classes. Salsa classes start at 3 pm. Your university classes finish before 3 pm, you take salsa classes. Your university classes finish after 3 pm, you don´t take salsa classes.

WORKSHEET 8.5

SELF –EVALUATION

Answer the following self-evaluation questions:

1. La estrategia de Previewing & Predicting me ayudó a tener una idea de qué se trata el texto.
   Si No Tal vez

2. Entiendo cómo se usan los CONDICIONALES en algoritmos.
   Si No Tal vez

3. Puedo aplicar los CONDICINALES a situaciones de vida cotidiana.
   Si No Tal vez