



Republic of the Philippines  
**Department of Education**  
REGION III  
**SCHOOLS DIVISION OFFICE OF NUEVA ECija**

---

**LEARNING ACTIVITY SHEET**  
**SEPCIAL PROGRAM IN ICT 9**  
**BASIC PROGRAMMING 9**  
*First Quarter, Week 1*

Name of Learner: \_\_\_\_\_ Date: \_\_\_\_\_

Grade Level /Section: \_\_\_\_\_

**The Objectives and Significance of Computer Programming**

**BACKGROUND INFORMATION FOR LEARNERS**

Have you ever wondered how ATM (Automated Teller Machine) dispenses cash? How this machines are able to verify your PIN and check your account balance?

Have you also wonder how your social media account like Facebook, YouTube, Instagram or Twitter works?

The answer is **COMPUTER PROGRAM**. These computer programs play an active role in our lives today because applications are everywhere.

This lesson will help you understand the basic concepts of computer program, how it was created and what are the skills required to create a program.

**What is a computer program?**

**Computer program** is a collection of instructions complied using a programming language and can be executed by the computer to perform a specific task. Programs may be categorized as application software and system software.

The process of writing or editing source code is called **computer programming** while the person who practices this skill is referred to as **computer programmer**. Editing a program source code involves testing, analysing, debugging and sometimes require coordinating with other programmers to develop a successful program.



Republic of the Philippines  
**Department of Education**  
REGION III  
**SCHOOLS DIVISION OFFICE OF NUEVA ECija**

---

### **What is a programming language?**

**Programming language** is a computer language used by computer programmers to develop software programs, scripts and other set of instructions for computer to execute. There are programming languages that share similarities but each has its own syntax. Once a programmer learns the programming rules, syntax and structure, they can write the source code in a text editor then compile the code into machine language that can be understood by the computer.

There are so many programming languages nowadays. Github, a service that host over 96 million different software program listed the top 10 programming languages from 2014 to 2018.

1. Javascript
2. Java
3. Python
4. PHP
5. C++
6. C#
7. Typescript
8. Shell
9. C
10. Ruby

### **Reasons why you should learn to code today:**

#### **1. Coding develops structured and creative thinking.**

When you are given a specific task to complete, you don't just start to do it right away. First, you will create a plan and will sort out the things you need. Then, you start making detailed steps on what to do. Just like programmers, you don't just solve a problem right away. When you see a problem, you need to break it down into pieces, arrange the things you need and make a plan. When you start learning how to create a program, you will eventually develop the habit of working your way out in a very structured format. You gradually program your brain to break every problem into bits of information so you can understand better and create a successful outcome. You start thinking logically which makes your program more creative.



Republic of the Philippines  
**Department of Education**  
REGION III  
**SCHOOLS DIVISION OFFICE OF NUEVA ECija**

---

**2. Programming makes things easier for you.**

A simple computer program is capable of making your life easier than you could ever imagine. Something that works on pushing buttons can be programmed to do so by just a tap on your smartphone or when you double clap. Computer programs can easily save your personal information without the need to enter all your information over and over.

Unlike the old days when you write a letter to someone, you have to send it through a courier and wait for months before receiving a reply. But with the help of computer programs, social media platforms help make communication more efficient and engaging through the use of emails and video calls. Definitely, computer programs aim to make our life easier.

**3. Programming teaches you persistence.**

When you start to learn creating a computer program, you start seeing problems in the light of solutions. Your brain starts to look for ways to solve the problem efficiently. When you encounter a problem after learning to program, you start envisioning the possible ways to solve it. When you run your program and encounter an error, your brain immediately identify what to correct on your code and it will now give you an idea on how to solve the error. Absolutely, after being familiar with the problem solving skills, you will then apply this skill on your everyday life. You may even foresee some good results out of every problem you encounter. No matter how hard the problem might seem, you become determined to act on it anyhow. You transform yourself into a solution-driven individual.

## **LEARNING COMPETENCY**

Recognize the objectives and significance of computer programming.



Republic of the Philippines  
**Department of Education**  
REGION III  
**SCHOOLS DIVISION OFFICE OF NUEVA ECIJA**

---

## ACTIVITIES

### ACTIVITY 1

**Directions:** Identify the following. Write your answer on the blank before each number

\_\_\_\_\_ 1. A person who develops a program using different programming language and collaborates with other specialist to improve his/her output.

\_\_\_\_\_ 2. A process of collecting instructions executed by the computer to perform a specific task.

\_\_\_\_\_ 3. It is called the process of writing, editing and debugging a source code.

\_\_\_\_\_ 4. Used by computer programmers to develop software programs, scripts and other set of instructions for computer to execute.

\_\_\_\_\_ 5. It is the top programming language used by programmers from 2014 to 2018

### ACTIVITY 2

**Directions:** Answer the following questions:

1. Give at least 2 examples of your daily routine that uses computer program. Explain why.

**Answer:**

---

---

---

2. If you will be a computer programmer/app developer in the future, what kind of application will you create? How will it make your life easier?

**Answer:**

---

---

---



Republic of the Philippines  
**Department of Education**  
REGION III  
**SCHOOLS DIVISION OFFICE OF NUEVA ECIJA**

---

### ACTIVITY 3

**Directions:** Find the following computer programming terminologies on the box below. Encircle the word.

1. Programming
2. Coding
3. Debugging
4. Syntax
5. Language

1. Analysing
2. Testing
3. Application
4. Software
5. Java

B	S	R	T	O	N	W	E	J	T	J	K	A
S	G	A	P	P	L	I	C	A	T	I	O	N
Y	N	E	R	Y	A	M	L	V	U	D	L	A
N	I	D	S	O	F	T	W	A	R	E	V	L
T	T	S	C	O	M	P	U	T	E	B	O	Y
A	S	W	G	V	A	B	G	T	J	U	K	S
X	E	W	N	L	A	N	G	U	A	G	E	I
I	T	R	I	H	J	K	N	X	A	G	X	N
N	B	F	D	D	S	X	E	Q	Z	I	C	G
C	P	R	O	G	R	A	M	M	I	N	G	C
B	W	Q	C	V	B	J	F	J	S	G	D	J

### ACTIVITY 4 (OPTIONAL)

**Directions:** Watch the 4-minute video of the well-known computer programmers/developers on the link below:

How to Become A Good Programmer?

<https://www.youtube.com/watch?v=2-VKC8g2u1Y>

Write your reflection about the video

---

---

---

---

### REFLECTION

Programmers have to think logically about a problem. Once you start learning how to solve an error in your program, you stop giving up on other difficult situations in your day-to-day life. You



Republic of the Philippines  
**Department of Education**  
REGION III  
**SCHOOLS DIVISION OFFICE OF NUEVA ECija**

---

become patient because you know there is always a way on how you solve the problem. Just like what happens when you create a program, runs it, and debug it several times to reach the perfect solution.

## REFERENCES

<https://www.entrepreneur.com/article/289248#:~:text=Learning%20to%20program%20teaches%20you,possible%20ways%20to%20solve%20it.>

<https://www.youtube.com/watch?v=2-VKC8g2u1Y>

[https://en.wikipedia.org/wiki/Computer\\_program#:~:text=A%20computer%20program%20is%20a,programmer%20in%20a%20programming%20language.](https://en.wikipedia.org/wiki/Computer_program#:~:text=A%20computer%20program%20is%20a,programmer%20in%20a%20programming%20language.)

<https://www.computerhope.com/jargon/p/programming-language.htm>

Prepared by : **NOEMI F. MAGNO**  
Name of Writer

Noted: **LABERNE A. LADIGNON, JR**  
Division ICT Coordinator/ OIC EPS