



**WORKSHEET 17**

**School: Ba Sangam College**  
**Subject: Computer Studies**

**Year / Level: 11**  
**Name of Student: \_\_\_\_\_**

<b>Strand</b>	3 – Programming
<b>Sub strand</b>	3.1 Programming
<b>Content Learning Outcome</b>	Describe generation of programming language

**4. Problem-Oriented Languages: The Fourth Generation**

Problem-oriented languages, also known as very high level languages, require little special training on the part of the user. Unlike general-purpose- languages, problem-oriented languages are designed to solve specific problems. This group also includes query languages and application generators:

- *Query languages:* Query languages enable nonprogrammers to use certain easily understood commands to search and generate reports from a database. An example is the commands used on an airline reservations system by clerks needing flight information.
- *Application generators:* An application generator contains a number of modules-logically related program statements - that have been pre-programmed to accomplish various tasks. An example would be a module that calculates over-time pay.

**5. Natural Languages: The Fifth Generation**

Natural languages are still being developed. They are designed to give people a more human (—naturall) connection with computers. The languages are human languages: English, French, Japanese, or whatever.

The five generations of programming languages are summarized as follows:

**PROGRAMMING GENERATIONS**

<b>GENERATION</b>	<b>NAME</b>	<b>SAMPLE STATEMENT</b>
First	Machine	10010001
Second	Assembly	ADD 210(8, 13),O2B(4, 7)
Third	Procedural	Overtime: = 0
Fourth	Problem	FIND NAME = JONES
Fifth	Natural	IF patient is dizzy, THEN check temperature and blood pressure

**ACTIVITY**

**Short Answer**

1. How is an interpreter different from a compiler? (2marks)

---

---

---

2. What is the characteristic of the 5<sup>th</sup> language? (2marks)

---

---

---

**Fill in the blanks (5 marks)**

1. \_\_\_\_\_ language is the only language that a computer understands
2. Assembly language is regarded as the \_\_\_\_\_ generation language
3. A program converted into machine language by a translator is called \_\_\_\_\_
4. An \_\_\_\_\_ converts a high-level language program into machine language line by line
5. \_\_\_\_\_ is an example of 5<sup>th</sup> generation language

**True or False (4marks)**

1. A program is a set of instruction \_\_\_\_\_
2. The development of computer language is classified into two categories \_\_\_\_\_
3. Assembly language consist of binary numbers i.e 0 and 1 \_\_\_\_\_
4. Machine language uses simple English words and phrases \_\_\_\_\_