RESEARCH WORK – 2

1.What are Translators in programming languages?

A translator is a program that converts source code written in one language into another language.

2.What is Assembler, Compiler, and Interpreter?

Assembler: An assembler is a program that translates assembly language code (a low-level programming language) into machine code.

Compiler: A compiler is a program that translates source code written in a high-level language (such as C++, Java, or Python) into machine code. A compiler takes the entire program as input and generates object code

Interpreter:An Interpreter is a software tool that reads the source code of a high-level programming language and directly executes it without the need for compilation. The interpreter reads each line of code and immediately executes it, providing immediate feedback to the programmer.

3.What are IDE's?

An integrated development environment is a software application that helps programmers develop software code efficiently. An IDE typically includes a source code editor, a debugger, and a compiler or interpreter, along with other tools that make it easier to write, test, and debug software. commonly used for developing software in a variety of programming languages, including Java, Python, C++, and many others. They are particularly useful for larger projects where managing code and dependencies can become complex.

4.Examples for IDEs or Compilers for C programming?

IDEs:

1. Visual Studio Code (VS Code)
2. Eclipse CDT
3. Code::Blocks
4. NetBeans
5. Xcode (for macOS)
6. Dev-C++
7. Qt Creator

Compilers:

1. GCC (GNU Compiler Collection)
2. Clang
3. Microsoft Visual C++
4. Borland C++ Compiler
5. Turbo C/C++
6. DJGPP
7. Pelles C