For this assignment, you are going to find the words that are formed by adding a prefix or a suffix (or both) in a given passage, and indicate how each word is formed. A typical example of what you ought to do is like this:

-Microprocessor: Micro (Prefix meaning small) + Process (Root word meaning operation or dealing with) + or (Suffix for jobs)

You can find the passage (which is elicited from the book “Postmortems from Game Development” by Austin Grossman) in the rest of this document. Find as many words as you can in this passage. The deadline for submitting the answers is Wednesday, Aban, 13th. As mentioned previously, assignment reports should be submitted in hard-copy.
GAME DEVELOPMENT TEAM ROLES

The age of the single-author game is more or less over, and game production has been split into discrete jobs. As an industry, we have invented terminology to describe the different members of a development team. This has turned out to be a devil’s bargain—job titles are great because they tell you who’s responsible for what kinds of tasks, but they also tend to give people the misconception that everything outside their job description is none of their business. One of the lessons that repeat throughout the postmortems is how important it is for the entire team to understand what the game is and be able to contribute ideas on any subject. Otherwise, the abilities of the team aren’t really being put into play.

Every one of these descriptions is an oversimplification. In practice, game development jobs shape themselves to the needs of the project and the skills of the person doing them. The sharp lines within art, programming, design, audio, writing, and management that seem to exist on a spreadsheet, don’t exist at all—every one of these jobs has technical, artistic, and game-design areas. That said, here is a rundown of current industry job titles and what they, basically, mean:

Artist

This is the broad category of workers who create the graphical content for a game. It can include anything from a concept artist to a 3D animator to an architectural consultant; from artists make cut-scenes, walking animations, 3D furniture, wall-textures, landscape geometry, fake newsreel footage, and a thousand other things. Although technical expertise is always a plus, the actual requirements vary. A concept artist might work only with paper and pencils, whereas a technical artist might spend 90% of their time hacking file formats and writing custom plug-ins for a commercial graphics package.
As with all game industry jobs, this one blurs into the others. Designing natural-looking terrain geometry and realistic architecture blurs into level design; creating interface buttons blurs into interface design; writing 3D Studio plug-ins blurs into tools-programming; crafting textures to look correct in a 3D world requires understanding rendering algorithms; and so on.

**Audio**

Long neglected, audio is now one of the fastest-growing areas in game production. Two reasons are that exciting new audio technologies are emerging and people are paying attention to games as complete entertainment experiences rather than just graphical displays. Sound and music are tools for giving virtual worlds richness, character, and emotion—tools we’re just starting to take advantage of.

Audio departments divide roughly into sound engineers and composers. Sound engineers design the audible world of a game—the voice of a character, the chunky click of a weapon reloading, the tread of a shoe on dry leaves or cold marble, much as a foley engineer in the film world. They supervise recording sessions and engage with emerging audio technologies, such as 3D sound and voice synthesis. Composers score the game, working inside the technical constraints of the computer and the formal constraints of interactive media. If emotion is a problem area for computer games, music might be one of the most powerful solutions.

**Designer**

This job is the hardest to pin down and the most variable between different projects, companies, and designers. It is perhaps most correct to say broadly that game designers craft the player’s interactive experience using tools that artists and programmers make—they make the fun. Typical design tasks include laying out the game interface, building the level maps, designing puzzles, balancing units’ abilities to create a game that is both fair and challenging. Designers often double as the game’s writer for story and in-game dialogue and text, although increasingly this profession is becoming separate.

In some teams, the lead designer is like an auteur film director. They have the initial vision for the game; they write the overall design document and the story. Later in the development process, this initial game concept is a touchstone for determining priorities. Other designers work as a kind of caretaker for a group vision of the game—they hear all the suggestions, record them, and turn them into a full design document for the game. They make the final decision on some issues, but the design doesn’t start with them. The design starts from a company’s overall strategy decision, an existing game engine, or a team vote.

Designers often have specialized skills in a related field, such as writing, graphic design, or programming, and this issue shapes how they mesh with the rest of the team. Some technical knowledge is always necessary, so that the
designer understands the tools of their trade and what a computer can and can’t do.

**Producer**

Producers are the ones who manage project teams as a whole. They are in charge of project management issues, such as schedules, budget, morale, and coordinating different sections of a project team. They host meetings, facilitate communication, resolve problems, and accept responsibility for the product as a whole.

Leadership styles vary. Some producers view themselves purely as administrators—they make sure the schedule and budget work correctly, and coordinate the team’s efforts, but leave the creative vision to a project leader or the design, art, or programming lead. Other producers are the keepers of the product’s overall concept and serve as creative director and final decision-maker on the product’s feel.

Producers also serve as a liaison to company management and publisher concerns. They make sure a given product meshes with overall company strategy and integrate marketing and localization efforts into the project team’s work. Likewise, they represent the team’s progress and needs to upper management—if the project is late or there’s a problem with working conditions, the producer brings the news up the chain of command.

**Programmer**

Programmers write the software that comprises the game engine and the tools the team uses to produce the product. Game programmers often specialize in a game subsystem, such as graphics, networking, audio, or AI, or on tools programming, creating things, such as game editors and exporters.

It’s easy to see programmers as pure technicians, but as much artistry exists on the programming side as anywhere else—any truly great game is a marriage of creative vision with technical decision-making. An AI programmer creates one of the core elements of the game experiences—the opponent or ally who shares the world with players, who competes or fights or bonds with them. Likewise, coding a good game editor means understanding designers’ needs and priorities, as well as the designers themselves. Programmers have to make decisions daily that require an overall understanding of the game vision.

The earliest games were entirely programmer-written, and some programmers see this time as the golden age—games created by people who thoroughly understood the limitations and strengths of the machine and the programs that ran it. That era is past, but programmers now are still the team members who can convey that understanding to the team as a whole.

**Quality Assurance**

The quality assurance (QA), or playtest department, tests the finished product (or work-in-
progress) to see that it works the way it’s intended to. Sadly, this job frequently puts the team members in the position of bearers of bad news—“don’t shoot the messenger” might be the unofficial motto of every QA department in existence.

The official QA mandate is to make sure the product does what it’s supposed to do. They check, in excruciating detail, every feature and every level of the game, in every combination imaginable. This process includes checking in every language the game ships in and on every reasonable configuration of hardware and operating system, in PC products.

The unofficial QA role is that they tend to know the game better than anyone else on the team—no one else is in contact with the actual product, 40 or 60 or 80 hours a week. QA often has the best view of what’s actually happening to a product and is best qualified to comment on intangibles: is the game fun and does it correspond to the initial vision. In the best case, QA can become creative collaborators rather than just bug-reporters, reporting on how the game feels and plays, rather than just working from a checklist.