1. The difference between inductive and deductive reasoning is that the evidence or assumptions in deductive reasoning are assumed to be true and therefore the outcomes are true as well. An example of deductive reasoning would be mathematics, where theorems are used to extrapolate results to various problems. Inductive reasoning on the other hand uses evidence to create hypotheses or probable outcomes based on the inputs. This is the basis of the scientific method, where data supports a hypothesis.

Most people use both types of reasoning, however, when and how they use them can change greatly based on their motivations. Deductive reasoning is more commonly used to confirm the desired outcome, while inductive reasoning is more commonly used when the outcome is not directionally focused.

A real-life example of deductive reasoning would be in figuring out a budget. Commonly accepted financial advice says that housing expenses should be <40% of your take-home income. Therefore if your income is $2000/month your expenses for rent or mortgage should be <$800/month. A real-life example of inductive reasoning in creating the same budget would be to examine your spending habits, compare categories and goals, and use that to arrive at a monthly budget.

1. Inductive reasoning is different from deductive reasoning. With deductive reasoning, you start with a generalization or theory and then test it by applying it to specific incidents. Deductive reasoning is using general ideas to reach a specific conclusion. Inductive reasoning uses specific ideas to reach a broad conclusion. You may have heard this explained in school as going from big to small when using deductive reasoning and going from small to big when using inductive reasoning.

Inductive reasoning is a type of logical thinking that involves forming generalizations based on experiences, observations, and facts. Employers usually look for employee that have inductive thinking. Inductive reasoning is an example of an analytical soft skill. Unlike hard skill which are job-specific and generally require technical training, soft skills relate to how you interact with people, social situations, and ideas.

Deductive reasoning is what scientists might use in a lab to test a hypothesis. They clarify the issue to make sure to understand what is at stake.  They look at data relating to the issue, asking questions. This might be a great skill for people who are generally managers because they need to make those specific critical business decisions. With this type of reasoning and logic they are able to make decision that will benefit their company.

I have seen inductive thinking in salespersons who share their observations with the customer, and that customer may share this with others that they know to come to this salesperson for them to make another sale. So now this salesperson shares their observations and other examples with their customers to get more of a clientele.

I have seen deductive thinking in everyday choices, usually we use this in our everyday lives.