Practical 20

Understanding ethical dilemma using

I. Moral machine
II. Survival of the best fit

Introduction:

Ethical dilemmas are situations where there is a conflict between two moral principles, and choosing one often means compromising the other. In AI systems, such dilemmas arise when algorithms must make decisions affecting human lives, such as self-driving cars determining whom to save in an accident. Tools like *Moral Machine* and *Survival of the Best Fit* simulate these scenarios, enabling us to examine the principles guiding these decisions.

Tools Overview:

1. **Moral Machine**:

   o An interactive platform developed by MIT that presents users with scenarios involving autonomous vehicles.

   o Users decide who should be prioritized in life-and-death situations based on various factors like age, gender, social role, or lawfulness.

   o Helps collect data on ethical preferences across cultures.

2. **Survival of the Best Fit**:

   o A simulation or conceptual game where individuals face resource constraints, encouraging critical thinking about survival strategies and ethical choices.

   o Highlights the impact of competition, collaboration, and ethical decision-making on resource allocation and survival.

Methodology:

1. **Using Moral Machine**:

   o Visit the *Moral Machine* website.

   o Engage in multiple decision-making scenarios involving ethical dilemmas.

o Analyze patterns in your choices and their justification (e.g., prioritizing young over old, lawful over unlawful).

2. **Using Survival of the Best Fit**:

   o Simulate scenarios where resources are limited and participants must decide strategies for survival.

   o Examine how ethical principles (e.g., fairness, equity) influence decisions in competitive situations.

Observations:

1. **Moral Machine Results**:

   o Decisions often vary based on individual values, cultural norms, and personal biases.

   o Common dilemmas include:

      ▪ Saving more lives versus fewer lives.

      ▪ Choosing between pedestrians and passengers.

      ▪ Prioritizing law-abiding individuals over rule-breakers.

2. **Survival of the Best Fit Insights**:

   o Emphasizes the importance of collaboration in resource-limited environments.

   o Ethical dilemmas arise when one individual's survival depends on sacrificing others' resources.

   o Highlights trade-offs between selfishness and collective welfare.

Analysis:

- Ethical dilemmas in AI require balancing competing moral principles like utilitarianism (greatest good for the greatest number) and deontology (following rules or duties).

- Cultural and individual preferences significantly influence decisions, as demonstrated by *Moral Machine*.

- Resource constraints, as seen in *Survival of the Best Fit*, reflect real-world challenges like healthcare allocation or environmental sustainability.

Conclusion:

Understanding ethical dilemmas using *Moral Machine* and *Survival of the Best Fit* provides valuable insights into human decision-making and its implications for AI systems. These tools underscore the complexity of embedding ethical principles into algorithms and the need for culturally sensitive AI policies.