1. **Incentive compatibility**: a mechanism is called incentive-compatible if every participant can achieve the best outcome to him/herself just by acting according to his/her true preferences.

There are several different degrees of incentive-compatibility:

* The stronger degree is **Dominant-strategy incentive-compatibility.** It seems that truth-telling is a weakly-dominant strategy. I.e, you fare best by being truthful, regardless of what the others do (even if they are irrational or even collude against you). In DSIC mechanism, strategy considerations cannot help any agent achieve better outcomes than the truth; (只有在说真话的情况下才能得到好的收益)
* A weaker degree is **Bayesian-Nash incentive-compatibility (BNIC).** It means that there is a Bayesian Nash equilibrium in which all participants reveal their true preferences. I.e, if all the others act truthfully, then it is also best for you to be truthful.