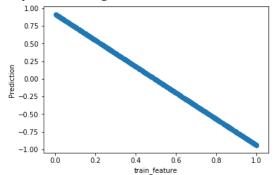
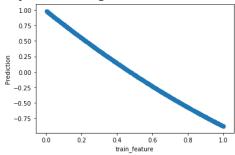
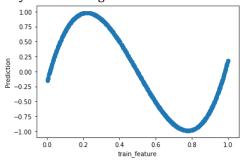
$Polynomial\ of\ Degree: 1$



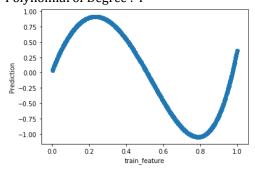
Polynomial of Degree: 2



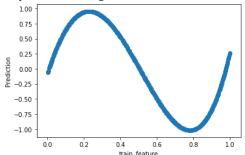
$Polynomial\ of\ Degree: 3$



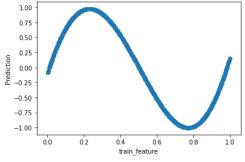
Polynomial of Degree: 4

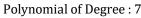


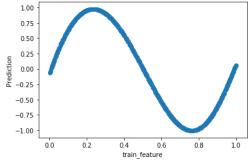
Polynomial of Degree: 5



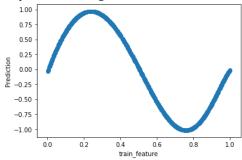
Polynomial of Degree: 6



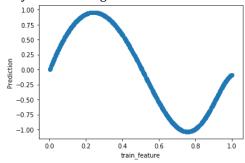




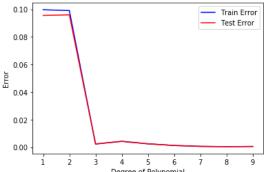
Polynomial of Degree: 8



Polynomial of Degree: 9



Plot of Degree of Polynomial vs Error



As we see the polynomial best suited is the one with minimum test error test error whose degree is 8