Introduction:

The average age of a calf at weaning time is the average of the ages of the calves from the birth time to weaning time.

1. The first step is to calculate the age in days given by:

age\_in\_days= weaning.entry\_date-catttle.birth\_date

1. The next step is to adjust the age\_in\_days according to the *manage code. The logic behind this is : if manage code is not in any of (A,B,C,D,E,F,N,K,S,T,X) then* ***age\_in\_days = age\_in\_days***

*Else* ***age\_in\_days=0****. Call this field as* ***AD\_205.***

1. The third step is to set the flag for the rows according the manage code field. Call this flag field as ***calf\_count***. The logic is:

*if manage code is not in any of these: (A,B,C,D,E,F,N,K,S,T,X) then* ***calf\_count=1***

*Else* ***calf\_count=0.***

1. Next, calculate the average age of the calves. Call this field *avg\_age*. The logic is:

**avg\_age = *SUM*(*age\_in\_days) / SUM(calf\_count)***

1. Next find out if a calf is irregular or not depending upon the *age\_in\_days, avg\_age* and *manage\_code*. Call this field irr\_calf. The logic is :

If **age\_in days > avg\_age+45** **OR age\_in days < avg\_age+45**

OR **manage\_code in (A,B,C,D,E,F,N,K,S,T,X**) THEN irr\_calf= True ELSE irr\_calf=FALSE

1. Now to find age\_at\_weaning:

If irr\_calf=False, then **age\_at\_weaning=AD\_205**

ELSE **age\_at\_weaning=0**

1. Now find count\_at\_weaning:

If irr\_calf=False, then **count\_at\_weaning=AD\_205**

ELSE **count\_at\_weaning=0**

1. Now to find Average age (in days ) at weaning time the formula is:

**Avg\_age\_at\_weaning= SUM (age\_at\_weaning) / SUM (count\_at\_weaning)**