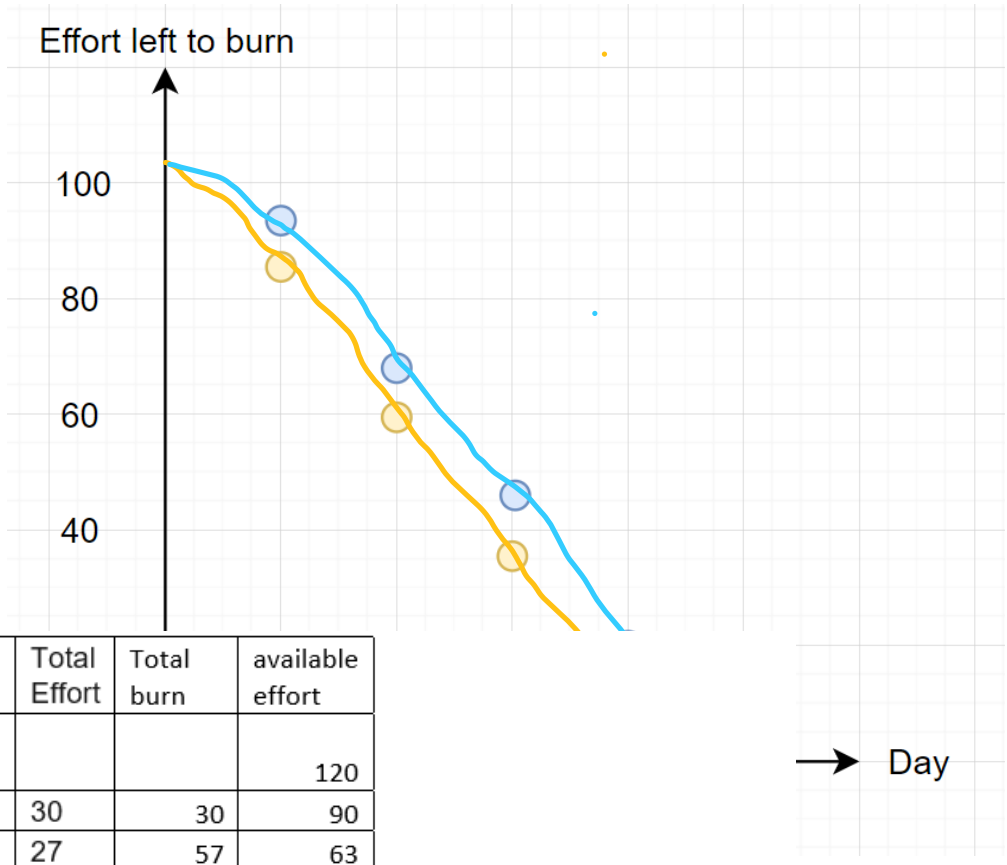
1. Total effort = 116
   Working days = 5
   Working hours per day = 3person x 8hrs per day = 24 hrs
   Total working hours = 5 days x 24 hrs = 120 hrs
   Average effort per day = 116/5 = 23.2

Ideal effort left	Actual effort left
92.8	86
69.6	59
46.4	35
23.2	15
0	0



Day of Sprint		Total Effort	Total burn	available effort
0				120
1		30	30	90
2		27	57	63
3		24	81	39
4		20	101	19
5		15	116	4

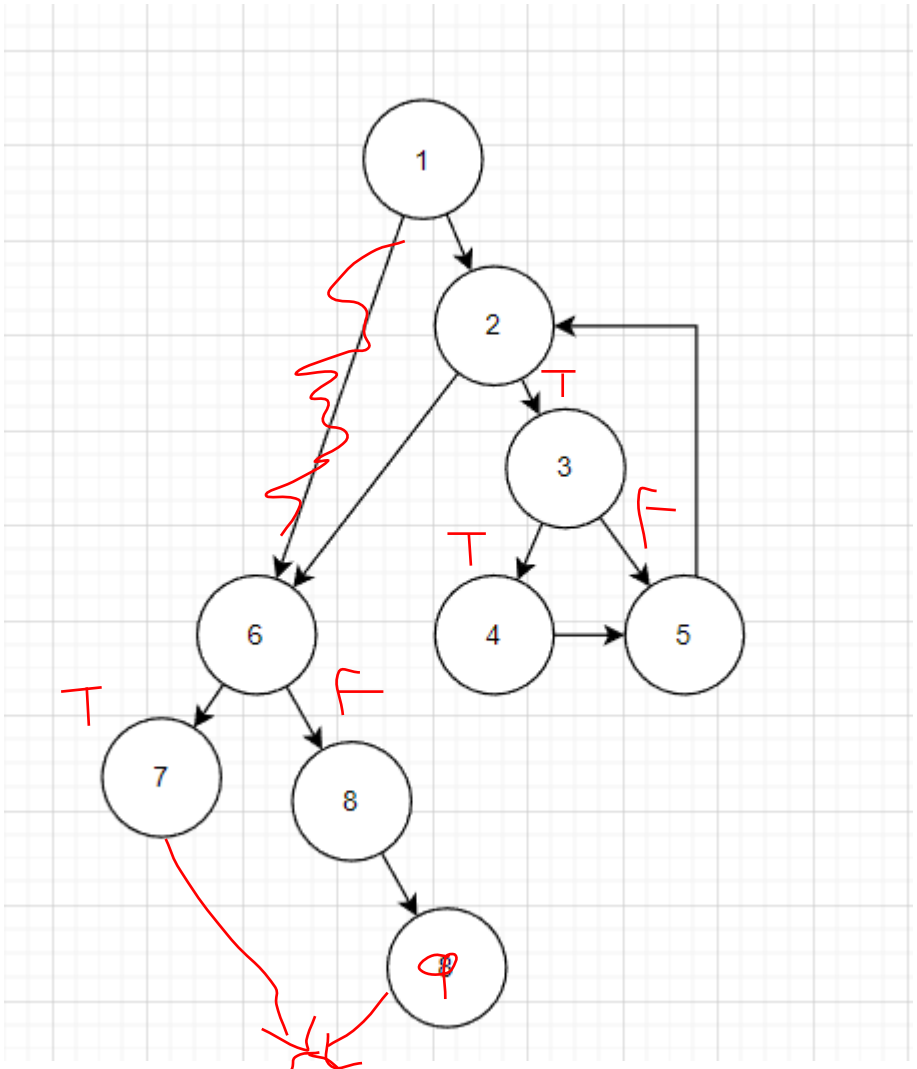
total burn is accumulating the total effort.

Available effort is taking total available hours to minus the total effort of the day.

Day of the Sprint	Target	Actual
0	120	120
1	96	90
2	72	63
3	48	39
4	24	19
5	0	4

plot a graph from this table

2. i)



ii) - VIP_today = 1, count = 1

- count = 2
- VIP_today = 2, count = 3
- count = 4
- VIP_today = 3, count = 5
- VIP_today = 4, count = 6
- count = 7
- count = 8
- VIP_today = 5, count = 9
- VIP_today = 6, count = 10

since the VIP_Today is 6 and not > 8, output is Target failed

3. Probability of failure on demand (POFOD) measures the likeliness of a feature failing or being unavailable when it is required by the user. It is used to measure the reliability of critical features.

   Rate of failure occurrence (ROCOF) measures the amount of errors occurring for a feature for a given point in time. It is used to measure the reliability of features that processes a large amounts of request in a short time.

Availability (AVAIL) measures the total amount of time the feature will be able to provide services to user requests. It is used to measure the reliability of other features that focus on increasing uptime and allow users to use them whenever they want.

Sample

Reliability Metric	How they work	When is it best used
Probability of failure on demand (POFOD)	POFOD is the likelihood that a service request will fail. A POFOD of 0.01= one of a thousand service requests may result in failure	Relevant for many safety-critical systems with exception management components Emergency shutdown system in a chemical plant.
Rate of occurrence of failures (ROCOF)	ROCOF corresponds to the failure frequency. A ROCOF of 2/100 = 2 failures may occur in each 100 operational time units	Relevant for systems where the system has to process a large number of similar requests in a short time Credit card processing system, airline booking system.
Availability (AVAIL)	Measure of the fraction of the time that the system is available for use. Takes repair and restart time into account Availability of 0.998 means software is available for 998 out of 1000 time units. Availability of 0.99 in a 24-hour period, means the system may be unavailable for 14.4 minutes.	Relevant for non-stop, continuously running systems telephone switching systems, railway signalling systems.