QUESTIONS

1. Consider the survival data given in the following table. Compute and plot the estimated survivorship function, the probability density function, and the hazard function.

Year of Follow-up	Number Alive at Beginning of the Interval	Number Dying in the interval
$0-1$	1100	240
$1-2$	860	180
$2-3$	680	184
$3-4$	496	138
$4-5$	358	118
$5-6$	240	60
$6-7$	180	52
$7-8$	128	44
$8-9$	84	32
≥ 9	52	28

2. The following is a life table for the total population (of 100000 live births) in the United States, 1959−1961. Compute and plot the estimated survivorship function, the probability density function, and the hazard function.

Age Interval	Number living at beginning of age interval	Number dying in age interval
$0-1$	100000	2593
$1-5$	97407	409
$5-10$	96998	233
$10-15$	96765	214
$15-20$	96551	440
$20-25$	96111	594
$25-30$	95517	612
$30-35$	94905	761
$35-40$	94144	1080
$40-45$	93064	1686
$45-50$	91378	2622
$50-55$	88756	4045
$55-60$	84711	5644
$60-65$	79067	7920
$65-70$	71147	10290
$70-75$	60857	12687
$75-80$	48170	14594
$80-85$	33576	15034
85 and over	18542	18542