## **Workloads Types**

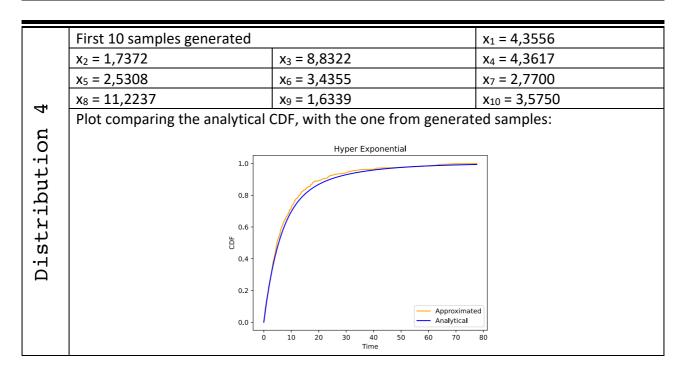
To have this assignment evaluated for the in-class exam, please upload on WeBeep a ZIP file including:

- the source code used to solve this assignment
- this file, with the table below properly filled

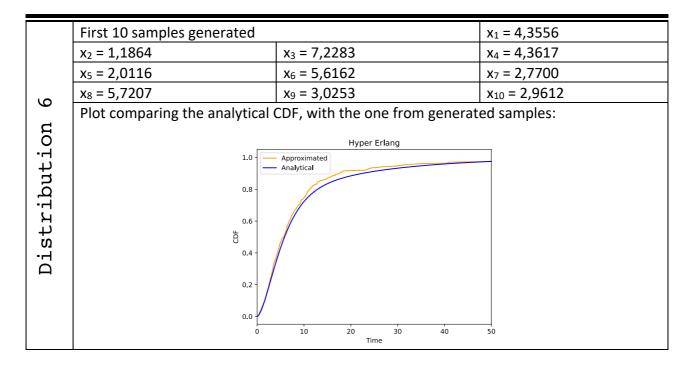
Name	(Family + given)	Giovanni Demasi	
Student ID (codice persona)			10656704
QR-co	de ID (8 digits of the QR that wa	71847928	
	First 10 samples generated		x <sub>1</sub> = 13,0430
	x <sub>2</sub> = 12,3785	x <sub>3</sub> = 7,1318	x <sub>4</sub> = 13,0406
	x <sub>5</sub> = 11,4217	x <sub>6</sub> = 10,4814	x <sub>7</sub> = 13,7066
~	x <sub>8</sub> = 6,4028	x <sub>9</sub> = 12,5132	x <sub>10</sub> = 10,3493
	Plot comparing the analytical CDF, with the one from generated samples:		
Distribution	Uniform  1.0 - Approximated Analytical  0.8 - 0.6 - 0.0 - 0.		

	First 10 samples generated		x <sub>1</sub> = 5
	x <sub>2</sub> = 10	$x_3 = 10$	$x_4 = 5$
	x <sub>5</sub> = 10	x <sub>6</sub> = 10	$x_7 = 5$
	x <sub>8</sub> = 10	$x_9 = 15$	x <sub>10</sub> = 15
2	Plot comparing the analytical CDF, with the one from generated samples:		
Distribution	1.0 - 0.8 - 0.6 - 0.4 - 0.4 -	Discrete - Approximated - Analytical	eu samples.
jū	0.2 -	4 6 8 10 12 14 16 Time	

	First 10 samples generated		x <sub>1</sub> = 2,1778
	x <sub>2</sub> = 3,0401	x <sub>3</sub> = 15,4564	$x_4 = 2,1809$
	x <sub>5</sub> = 4,4290	x <sub>6</sub> = 6,0122	x <sub>7</sub> = 1,3850
	x <sub>8</sub> = 19,6414	x <sub>9</sub> = 2,8593	x <sub>10</sub> = 6,2562
	Plot comparing the analytical CDF, with the one from generated samples:		
Distribution 3	Plot comparing the analytical CDF, with the one from generated samples:  Exponential  1.0  Approximated Analytical  0.8  0.4  0.2  0.0  0.0  0.0  0.0  0.0  0.0		
	0	10 20 30 40 50 60 Time	



	First 10 complex generated		v = 27 1004
	First 10 samples generated		x <sub>1</sub> = 27,1904
	x <sub>2</sub> = 1,8834	$x_3 = 12,0880$	x <sub>4</sub> = 3,6751
	$x_5 = 3,3385$	x <sub>6</sub> = 10,5915	$x_7 = 1,2318$
	x <sub>8</sub> = 8,0852	x <sub>9</sub> = 5,7812	x <sub>10</sub> = 4,9672
. 5	Plot comparing the analytical CDF, with the one from generated samples:		
Distribution	Hypo Exponential		
۱ <del>,</del> ۲	1.0	- Approximated - Analytical	-
bt	0.8 -		
i i	0.6 -		
st	CDF		
Di	0.4 -		
	0.2 -		
	0.0 -	/	
	0	10 20 30 40 Time	



## Clarification about columns used

As requested by the assignment specification, for the uniform and exponential distributions it has been used the second column, while for the discrete distribution the first column has been used. For the hyper-exponential, the first column has been used for branch selection, while the second column has been used to generate the sample.

The hypo-exponential samples have been generated using the second and third column. Lastly, for the hyper-erlang, the first column has been used for branch selection, the second column has been used for the first branch while the second and third column together have been used for the second branch.