Submission 26 April

## Jenetic Algorithm Assignment IRM2016003 Aditya Yoel

2.1	Schemata	Matching Strings	Order(0)	Defining Length?
-		A,= 11101111	1	0
	H1 = 1xxxxxx	A2 . 00010100; A3:01000011	1	0
	H= = Oxxxxxxx H= = xxxxxx11	A1 = 11101111 ; A3 = 01000011	2	1
-	H4 = xxx0x01x	A3 = 01000011	3	3
	Hs = Ixxxxx Ix	A. : IIIOIIII	2	6
	He = Ixxxxx1x	A, = 11101111	2	0
	1. 1. 1		1.1	

Schemata	Probability of Survival Mutation with Sm(H)	Probability of Survival with Ocosover SCH)	
Hı	(0.999)^1 = 0.999	1	and the same of
H <sub>2</sub>	$(0.999)^{1} = 0.999$	1	-
H <sub>3</sub>	(0.999) 2 = 0.998	0.8786	1
Н,	$(0.999)^3 = 0.997$	6.6357	1
Hs.	(0.999) 2 = 0.998	0.2714	
He	(0.999)^2 = 0.998	0.2714.	

C-0 1	C (11) (1 P ) (11)	Pm = 0.001
Hormula:	$Sm(H) = (1-Pm)^{\wedge} o(H)$	
	S_(H) = 1-P_S(H)	P = 0.85
	(l,-1)	g lesting to good
		•

	0		
02.	String	Fitness	
CONTRACTOR OF CHARLES AND CONTRACTOR	10001	10	2
Acres de la constante de la co	11100	20	Ymutation = 0.01
	00011	5	Peronous = 0.7
	01110	15	H, = lxxx
	-		$H_2 = 0 \times 1 \times 1$
	Since		
	FIM	(Ku) > m (k	2) (k) [1- Pc S(H)] (1-Pm) 6(H) (L-1)
	СПИ	WINT A WITH	THE (1-1)
			8
	FOR HI		For H2
			100 1.2
	$m_{H}(0) = 2$	<u>)</u>	$M_{H_2}(0) = 2$
	(4) = 3	10/2 = 15	$f_{H_2}(0) = 20/2 = 10$
	1 = 50	0/4 = 12.5	1 = 25/2 = 12.5
	Pc = 0	10/2 = 15 10/4 = 12.5 .7, Pm = 0.0	$S(H_2) = 3 \qquad l-l = 4 \qquad O(H_2) = 3$
	O(H) = 1	, (l-1) = 4.	ffe to a filterial and a second
	S(H) = 0		NV STOLEN TO STOLEN STOLEN
	Expected Valu	ue is	Expected value is
		9	
v	2 x 15 x /1-	(1-0.01	$\int_{12.5}^{1} = 2 \times 10 \left( 1 - (6.7) \times (3) \right) (1 - 0.7)$
1	12.5	4	12.5 4
	2×30×1>	< 0.99	=> E[MH(KH)] 7, 0.7448
-	25	- 141	
100	Hence F[n	14(KH) 7, 2.3	76 Expected number my to 1
		)] ,, ,,	Fxpected number may be 1 in neut generation.
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	expedied 11	umber May be Pulration	\$ in
School and South Street, or the	neut ge	Wration	