Practical Assignment 02	2 (PA02)																						
										S	ection A:	Abstract	Factory M	ethod		1							
		1				Hierarch							ctory Patte				Main			Class Dia	•		
	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	5	3	6	14
	Merchandise class has correct constructor, taking club, price and type, as well as virtual getDescription function and static id counter		Soccettal class constructor sers imitated and then calls Merchandise constructor with "SocoerBall" as type, getDescription function calls and extends Merchandise getDescription function with inflated variable.	LiverpoolShirt constructalls Shirt constructor v	ChelseaShirt constructor takes string variable, and calls Shirt constructor with "Chelsea", any price and the string variable.	ArsenalShirt constructor takes string variable, and calls Shirt constructor with "Arsenal", any price and the string variable.	LiverpoolSoccerBall constructor takes bool variable, and calls SoccerBall constructor with "Liverpool", any price and the bool variable.	ChelseaSoccerBall constructor takes bool variable, and calls SoccerBall constructor with "Chelsea", any price and the bool variable.	ArsenalSoccerBall constructor takes bool variable, and calls SoccerBall constructor with "Arsenal", any price and the bool variable.	Total	MerchandiseFactory has pure virtual functions to create a SoccerBall Merchandise item and a Shirt Merchandise item.	ChelseaFactory implements functions to create a ChelseaSoccerBall Merchandise item and a ChelseaShirt, using their created constructors.	LiverpoolFactory implements functions to create a LiverpoolSoccerBall Merchandise item and a LiverpoolShirt, using their created constructors.	ArsenalFactory implements functions to create a ArsenalSocoerBall Merchandise item and a ArsenalShirt, using their created constructors.	Total	ChelseaFactory, LiverpoolFactory and ArsenalFactory are created.	Student asks user which products should be created, as well as options specific to that type of item.	Student creates concrete products using concrete creators, and outputs details of products created.	Total	Correct inheritance in the Merchandise hierarchy, between Merchandise and its child classes (SoccerBall and Shirl) and between these child classes and the concreteProducts.	Correct i	Correct associations between concreteCreators and concreteProducts (e.g. ChelseaFactory has associations to ChelseaSoccerBall and ChelseaShirt)	Total
u04483716	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	5	3	0	8
u04515146	2	2	2	2	2	2	2	2	2	18	2	0	0	0	2	0	0	0	0	6	0	0	6
u04534205	1	2	2	2	2	2	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0
u15223893	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	5	3	6	14
u15231748	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	0	5	8	5	3	6	14
u16068344	1	1	1	2	2	2	2	2	2	15	2	2	2	2	8	3	3	5	11	5	3	6	14
u16320965 u17016534	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	0	0	0	0	0	0	0	0
u17016534 u17029377	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	5	3	6	14 8
u17030553	2	0	2	2	2	0	0	2	2	18	0	0	2	2	8	0	0	5 0	10	5	3 0	0	0
u17053928	2	2	0 2	2	2	2	2	2	2	0 18	2	2	2	2	8	3	2	5	0 10	5	3	6	14
u17066736	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	5	3	6	14
u17102210	0	2	2	2	2	2	2	2	2	16	2	0	0	0	2	3	2	2	7	5	3	0	8
u17110310	0	0	0	2	2	2	2	2	2	12	2	2	2	2	8	3	2	5	10	5	3	6	14
u17169811	0	2	1	2	2	2	2	2	2	15	2	2	2	2	8	3	2	5	10	5	3	6	14
u17229457	2	1	2	2	2	2	2	2	2	17	2	2	2	2	8	3	2	5	10	5	3	0	8
u18019499	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	5	3	6	14
u18025685	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	5	3	0	8
u18034332	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	0	0	0	0	5	3	0	8
u18053239	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	5	3	6	14
u18055215	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	3	8	3	3	0	6
u18055461	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	5	3	6	14
u18061908	2	1	1	2	2	2	2	2	2	16	2	2	2	2	8	3	2	5	10	5	3	6	14
u18069704	2	2	2	2	2	2	2	2	2	18	0	0	0	0	0	0	0	0	0	5	3	6	14
u18074074	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	0	0	0	0
u18080368	2	2	2	2	2	2	2	1	1	16	2	2	2	2	8	0	0	0	0	5	3	6	14
u18105883	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	5	3	6	14
u18108467	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	5	3	0	8
u18169253	0	2	2	2	2	2	2	2	2	16	2	2	2	2	8	3	2	5	10	5	3	0	8
u18191135	1	2	2	2	2	2	2	2	2	17	2	2	2	2	8	3	2	5	10	5	3	6	14
u18196366	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	5	3	2	10
u18219919	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	5	3	6	14
u18265163	2	0	0	2	2	2	2	2	2	14	2	2	2	2	8	3	2	5	10	5	3	2	10
u18286250	0	2	2	2	2	2	2	2	2	16	2	2	2	2	8	3	2	5	10	5	3	6	14
u18312374	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	5	3	3	11

Practical Assignment 02	(PA02)									S	ection A:	Abstract	Factory M	ethod									
																				a. s.			
	2	2	2	Mer 2	chandise 2	Hierarch 2	y 2	2	2	18	Ab 2	stract Fa	ctory Patte	ern 2	8	3	Main 2	5	10 10	Class Dia	gram 3	6	14
					pu pu	_	>						ro				ed,						
	club X		Soccetterin class constructor sers inflated and then calls Merchandise constructor with "Soccetterial" as type, getDescription function calls and extends Merchandise getDescription function with inflated	LiverpoolShirt constructor takes string variable, and calls Shirt constructor with "Liverpool", any price and the string variable.	ChelseaShirt constructor takes string variable, and calls Shirt constructor with "Chelsea", any price and the string variable.	ArsenalShirt constructor takes string variable, and calls Shirt constructor with "Arsenal", any price and the string variable.	LiverpoolSoccerBall constructor takes bool variable, and calls SoccerBall constructor with "Liverpool", any price and the bool variable.	ChelseaSoccerBall constructor takes bool variable, and calls SoccerBall constructor with "Chelsea", any price and the bool variable.	Arsenal SoccerBall constructor takes bool variable, and calls SoccerBall constructor with "Arsenal", any price and the bool variable.	Total	MerchandiseFactory has pure virtual functions to create a SoccerBall Merchandise item and a Shirt Merchandise item.	ChelseaFactory implements functions to create a ChelseaSoccerBall Merchandise item and a ChelseaShirt, using their created constructors.	LiverpoolFactory implements functions to create LiverpoolSoccerBall Merchandise item and a LiverpoolShirt, using their created constructors.	ArsenalFactory implements functions to create a ArsenalSoccerBall Merchandise item and a ArsenalShirt, using their created constructors.	Total	ChelseaFactory, LiverpoolFactory and ArsenalFactory are created.	Student asks user which products should be created as well as options specific to that type of item.	Student creates concrete products using concrete creators, and outputs details of products created.		Correct inheritance in the Merchandise inerarchy between Merchandise and fits child classes (Soccafall and Shirt) and between these child classes and the concrete/products.	Correct i	Correct associations between concrete Creators and concrete Products (e.g. Chelsea Factory has associations to Chelsea Soccerball and Chelsea Shirt)	Total
u18335412	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	5	3	1	9
u18350110	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	5	3	2	10
u18371435	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	2	0	2	4	5	3	6	14
u19004232	2	1	1	2	2	2	2	2	2	16	2	2	2	2	8	3	2	5	10	5	3	6	14
u19009977	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	5	3	6	14
u19015951	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	3	3	6	12
u19021209 u19027372	2	2	2	2	2	1	1	1	1	14	2	2	2	2	8	3	2	5 5	10	3	3	4	10
u19027372 u19028815	0	0	0	0	0	0	0	0	0	8	0	2	0	2	8	3 0	0	0	10 0	5	0	0	0 5
u19029242	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	5	3	6	14
u19033347	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	5	3	6	14
u190337717	2	1	1	2	2	2	2	2	2	16	2	2	2	2	8	3	2	5	10	5	3	6	14
u19044233	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	5	3	0	8
u19044233	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	5	3	0	8
u19050993	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	2	2	4	8	5	3	0	8
u19053313	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	5	3	6	14
u19061359	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	5	3	6	14
u19062665	2	2	1	1	1	1	1	1	1	11	2	2	2	2	8	3	2	5	10	5	3	6	14
u19068035	2	2	1	1	1	1	1	1	1	11	2	2	2	2	8	3	2	5	10	5	3	6	14
u19068710	2	2	1	1	1	1	1	1	1	11	2	2	2	2	8	3	2	5	10	5	3	6	14
u19068752	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	5	3	6	14
u19072067										0					0				0				0
u19083786	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	5	3	6	14
u19100133	2	2	2	2	2	2	2	2	2	18	0	0	0	0	0	0	0	0	0	0	0	0	0
u19103345	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	5	3	6	14
u19116498	2	2	2	1	1	1	1	1	1	12	2	2	2	2	8	3	2	5	10	5	3	6	14
u19123460	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	5	3	6	14
u19126353	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	5	3	6	14
u19130938	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	5	3	6	14
u19141859	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	5	3	6	14
u19151952										0					0				0				0
u19153113	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	5	3	6	14
u19185032	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	5	3	6	14
u19185678	2	2	2	2	2	2	2	2	2		2	2	2	2		3	2	5		5	3	0	igsquare
u19198958	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	5	3	6	14

Practical Assignment 02	(PA02)									S	ection A:	Abstract	Factory M	ethod									
	2	2	2	Mer 2	chandise 2	Hierarch 2	y 2	2	2	18	Ab 2	stract Fa	ctory Patte	ern 2	8	3	Main 2	5	10 10	Class Dia	gram 3	6	14
					pu pu	_	>						ro				ed,						
	cluk M		Soccerball class constructor sets illusted and then calls Merchandise constructor with "Soccerball" as type. getDescription function calls and extends Merchandise getDescription function with inflated	LiverpoolShirt constructor takes string variable, and calls Shirt constructor with "Liverpool", any price and the string variable.	ChelseaShirt constructor takes string variable, and calls Shirt constructor with "Chelsea", any price and the string variable.	ArsenalShirt constructor takes string variable, and calls Shirt constructor with "Arsenal", any price and the string variable.	LiverpoolSoccerBall constructor takes bool variable, and calls SoccerBall constructor with "Liverpool", any price and the bool variable.	ChelseaSoccefBall constructor takes bool variable, and calls SoccefBall constructor with "Chelsea", any price and the bool variable.	Arsenal SoccerBall constructor takes bool variable, and calls SoccerBall constructor with "Arsenal", any price and the bool variable.	Total	MerchandiseFactory has pure virtual functions to create a SoccerBall Merchandise item and a Shirt Merchandise item.	ChelseaFactory implements functions to create a ChelseaSoccerBall Merchandise item and a ChelseaShirt, using their created constructors.	LiverpoolFactory implements functions to create LiverpoolSoccerBall Merchandise item and a LiverpoolShirt, using their created constructors.	ArsenalFactory implements functions to create a ArsenalSoccerBall Merchandise item and a ArsenalShirt, using their created constructors.	Total	ChelseaFactory, LiverpoolFactory and ArsenalFactory are created.	Student asks user which products should be created, as well as options specific to that type of item.	Student creates concrete products using concrete creators, and outputs details of products created.		Correct inheritance in the Merchandise inerarchy between Merchandise and fits child classes (Soccerball and Shirt) and between these child classes and the concrete/Products.	Correct inheritance between concreteCreators and Creator (e.g. Factory and ChelseaFactory)	Correct associations between concrete Creators and concrete Products (e.g. Chelsea Factory has associations to Chelsea Soccerball and Chelsea Shirt)	Total
u19214597	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	0	5	8	5	0	0	5
u19228882	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	5	3	0	8
u19236183	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	5	3	6	14
u19236272	2	2	2	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0
u19290498	2	2	2	2	2	2	2	2	2	18	0	2	2	2	6	3	2	5	10	5	3	6	14
u19294418	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	0	0	0	0
u19367211	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	0	0	0	0
u20424622	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	3	8	5	3	6	14
u20426799	2	0	0	1	1	1	0	0	0	5	2	2	2	2	8	3	2	5	10	5	3	6	14
u20426918	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	5	3	6	14
u20428082	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	5	3	6	14
u20430168	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	0	2	5	7	5	3	6	14
u20430516			_							0					0			_	0				0
u20430630	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	5	3	6	14
u20431997	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	5	3	6	14
u20432748	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	5	3	6	14
u20435780	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	0	0	0	0
u20435992	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	5	3	6	14
u20436077	2	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
u20437863	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	0	5	8	5	3	6	14
u20438151 u20439963		0	0	0	0	0	0	0		0	_	_	0		0	_		-	0	-	0		0 10
	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	5	3	2	
u20440562	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	5	3	6	14
u20441135	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	5	3	6	14
u20442018	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	5	3	6	14
u20443260	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	0	0	0	0
u20443626	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	5	3	4	12
u20444738	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	5	3	5	13
u20448474	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	0	0	0	0
u20450533	2	1	2	2	2	2	2	2	2	17	2	2	2	2	8	3	2	5	10	5	3	5	13
u20450932	1	2	2	2	2	2	2	2	2	17	2	2	2	2	8	3	2	2	7	5	3	0	8
u20453222	2	1	2	2	2	2	2	2	2	17	2	2	2	2	8	3	2	5	10	5	3	5	13
u20453478	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	5	3	0	8
u20456078	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	0	0	0	0
u20460067	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	5	3	6	14

Practical Assignment 02	2 (PA02)									S	ection A:	Abstract	Factory M	ethod									
	2	2	2	Mei 2	rchandise 2	Hierarch 2	у 2	2	2	18	Ab 2	stract Fa	ctory Patte	ern 2	8	3	Main 2	5	UML 10	Class Dia	gram 3	6	14
					_		>			10			ro Z			_							
	club		Soccettail class constructor sets intelled that there calls Merchandise constructor with "Soccetal" as type. getDescription function calls and extends Merchandise getDescription function with inflated	LiverpoolShirt constructor takes string variable, and calls Shirt constructor with "Liverpool", any price and the string variable.	ChelseaShirt constructor takes string variable, and calls Shirt constructor with "Chelsea", any price and the string variable.	ArsenalShirt constructor takes string variable, and calls Shirt constructor with "Arsenal", any price and the string variable.	LiverpoolSoccerBall constructor takes bool variable, and calls SoccerBall constructor with "Liverpool", any price and the bool variable.	ChelseaSoccefBall constructor takes bool variable, and calls SoccefBall constructor with "Chelsea", any price and the bool variable.	ArsenalSoccerBall constructor takes bool variable, and calls SoccerBall constructor with "Arsenal", any price and the bool variable.	Total	MerchandiseFactory has pure virtual functions to create a SoccerBall Merchandise item and a Shirt Merchandise item.	ChelseaFactory implements functions to create a ChelseaSoccerBall Merchandise item and a ChelseaShirt, using their created constructors.	LiverpoolFactory implements functions to create LiverpoolSoccerBall Merchandise item and a LiverpoolShirt, using their created constructors.	ArsenalFactory implements functions to create a ArsenalSoccerBall Merchandise item and a ArsenalShirt, using their created constructors.	Total	ChelseaFactory, LiverpoolFactory and ArsenalFactory are created.	Student asks user which products should be created, as well as options specific to that type of item.	Student creates concrete products using concrete creators, and outputs details of products created.		Correct inheritance in the Merchandise inerarchy between Merchandise and its child classes (SoccerBall and Shirt) and between these child classes and the concrete/Products.	Correct inheritance between concreteCreators and Creator (e.g. Factory and ChelseaFactory)	Correct associations between concrete Creators and concrete Products (e.g. Chelsea Factory has associations to Chelsea SoccerBall and Chelsea Shirt)	Total
u20460687	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	0	0	0	0
u20463163	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	5	3	6	14
u20465026	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	5	3	6	14
u20466570	2	2	0	2	2	2	2	2	2	16	2	2	2	2	8	0	0	0	0	0	0	0	0
u20468203	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	5	3	6	14
u20469366	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	5	3	0	8
u20471582	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	0	0	0	0	5	3	6	14
u20478144	2	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	5	3	6	14
u20479884	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	5	3	6	14
u20481218	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	0	0	0	0	5	3	6	14
u20486783	2	1	1	1	1	1	1	1	1	10	2	1	1	1	5	0	0	0	0	5	3	6	14
u20491141	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	5	3	6	14
u20494166	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	5	3	6	14
u20494654	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	4	2	6	12
u20498510	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	5	3	6	14
u20502126	2	1	1	2	2	2	2	2	2	16	2	0	0	0	2	0	2	0	2	5	0	0	5
u20504552	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	4	3	6	13
u20506237	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	5	3	6	14
u20507102	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	2	3	0	5
u20513667	1	1	1	2	2	2	2	2	2	15	2	2	2	2	8	0	0	0	0	5	3	0	8
u20519517	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	5	3	6	14
u20522623	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	0	0	0	0
u20528036	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	5	3	6	14
u20528834	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	0	0	0	0	5	3	6	14
u20529440	2	2	2	2	2	2	2	2	2	18	1	2	2	2	7	0	0	0	0	5	3	6	14
u20532581	1	2	2	2	2	2	2	2	2	17	2	2	2	2	8	3	2	2.5	7.5	5	3	0	8
u20534541	2	2	2	2	2	2	2	2	2	18	1	2	2	2	7	3	2	5	10	5	3	6	14
u20536951	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	5	3	0	8
u20538945	1	2	2	2	2	2	2	2	2	17	2	2	2	2	8	0	0	0	0	5	3	6	14
u20554240	2	2	2	2	2	2	2	2	2	18	1	2	2	2	7	0	0	0	0	5	3	6	14
u20556455	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	5	3	6	14
u20557622	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	5	3	6	14
u20573783	2	2	2	2	2	2	2	2	2	18	0	2	2	2	6	3	2	5	10	5	3	0	8
u20575085	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	5	3	6	14
u20578688	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	5	3	0	8
			<u> </u>	<u> </u>		<u> </u>		<u> </u>		10	<u> </u>				J		<u> </u>		10		J	J	J

Fractical Assignment 02	(. / (. /									s	ection A:	Abstract	Factory M	ethod									
				Mei	rchandise	Hierarch	у				Ab	stract Fac	tory Patte	ern			Main		UML	Class Dia	gram		
	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	5	3	6	14
	Merchandise class has correct constructub, price and type, as well as virtual grupp, procession and static id countrains.		soccerbair cass constructor seris initated and then calls Merchandise constructor with "SoccerBall" as type, getDescription function calls and extends Merchandise getDescription function with inflated variable.	LiverpoolShirt constructor takes string variable, and calls Shirt constructor with "Liverpool", any price and the string variable.	Ū	ArsenalShirt constructor takes string variable, and calls Shirt constructor with "Arsenal", any price and the string variable."	LiverpoolSoccerBall constructor takes bool variable, and calls SoccerBall constructor with "Liverpool", any price and the bool variable.	ChelseaSoccerBall constructor takes bool variable, and calls SoccerBall constructor with "Chelsea", any price and the bool variable.	ArsenalSoccerBall constructor takes bool variable, and calls SoccerBall constructor with "Arsenal", any price and the bool variable.	Total	MerchandiseFactory has pure virtual functions to create a SocoerBall Merchandise item and a Shirt Merchandise item.	ChelseaFactory implements functions to create a ChelseaSoccerBall Merchandise item and a ChelseaShirt, using their created constructors.	LiverpoolFactory implements functions to create a LiverpoolSoccerBall Merchandise item and a LiverpoolShirt, using their created constructors.	ArsenalFactory implements functions to create a ArsenalSoccerBall Merchandise item and a ArsenalShirt, using their created constructors.	Total	ChelseaFactory, LiverpoolFactory and ArsenalFactory are created.	Student asks user which products should be created, as well as options specific to that type of item.	Student creates concrete products using concrete creators, and outputs details of products created.	Total	Correct inheritance in the Merchandise hierarchy, between Merchandise and its child classes (SoccerBall and Shirt) and between these child classes and the concrete root of the root	Correct inheritance betw Creator (e.g. Factor	Correct associations between concrete Creators and concrete Products (e.g. Chelsea Factory has associations to Chelsea SoccerBall and Chelsea Shirt)	Total
u20581018	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	5	3	6	14
u20592061	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	5	3	0	8
u20632429	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	5	3	6	14
u20646284	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	5	3	6	14
u20660652	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	0	2	5	5	3	6	14
u20662302	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	5	3	6	14
u20692286	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	4	3	6	13
u20734621	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	0	5	5	3	6	14
u20780479	2	2	2	2	2	2	2	2	2	18	2	2	2	2	8	3	2	5	10	5	3	6	14

	Practical Assignment	02										Saction B:	State and	Stratogy Batt	orne						
The color of the			SoccerPlayer									bection b.	State and	I Strategy Patt	ems						
Part produces are serviced and			Class			State F	attern					Strate		'n				Main		Object	and State Diag
U04483716         44         22         2         3         3         3         2         13         1         3         3         3         13         2         4         4         10         6         6           U04531205         11         0		50			Ū				13	1	3	3	3		13	2	4	·	10		6
004483716		TOTAL		Abstract Card State class has pure virtual handle() and change Card State() functions, as well as a getter for the card Colour variable	NoCardState class has a constructor that sets the cardColour variable, as well as a handle function tha outputs the appropriate sentence and a changeCardState that returns a new instance of	YellowCardState class has a constructor that sets the cardColour variable, as well as a handle function that outputs the appropriate sentence and a change CardState that returns a new instance of change CardState that returns a new instance of	RedCardState class has a constructor that sets the cardColour variable, as well as a handle function tha outputs the appropriate sentence and a changeCardState that returns a new instance of	Added Cardstate private variable to SoccerPrayer class, as well as a commitFou(i) function that calls the CardState's handle() and changeCardState() functions	Total	Abstract PlayStyle has pure virtual play() function.	AttackPlayStyle inherits from PlayStyle and implements PlayStyle's play() function, which prints the appropriate string	DefendPlayStyle inherits from PlayStyle and implements PlayStyle's play() function, which prints the appropriate string	PossessionPlayStyle inherits from PlayStyle and implements PlayStyle's play() function, which prints the appropriate string	Added PlayStyle private variable to SoccerPlayer class, as well as a play() function that tests whether a player is on a red card by calling the CardState's getCardColour() function, and either outputs the appropriate red card statement or calls PlayStyle's	Total	Student created a SoccerPlayer with a given name and playstyle	Student calls the SoccerPlayer's committed method to show how the state changes from NoCard to YellowCard to RedCard, and then repeats on this	Student calls the SoccerPlayer's play() function to show how a SoccerPlayer outputs different values based on it's PlayStyle strategy. Student also shown how a SoccerPlayer's play() function outputs the appropriate string when a player is on a red card and play() is called.	Total	Correct object diagram with aggregation relationships between SocoerPlayer and its concrete PlayStyle and CardState objects, and having a name value as well. The concrete CardState class must have a valid	Correct state diagram with starting and ending points, as well as states for having not received a card, a decision between receiving a yellow card or a red card based on the severity of a foul, and receiving a red card if a yellow card was received in
104534205		44	2			3	3		13	1	3	3	3			2	4	4	10	6	
u15223893         50         2         2         3         3         3         2         113         0         3         3         3         12         2         4         4         10         0         4           u15231748         48         2         2         2         3         3         3         2         113         1         3         3         3         11         11         2         3         4         9         1         3         3         1         11         2         3         4         9         1         3         3         1         11         1         2         3         4         9         1         3         3         1         1         3         3         3         1         1         1         3         3         3         1         1         6         0			2	2	3	3	3	2	13	1	3	3	3	3	13	2	4	4	10	0	6
u15231748         48         2         2         3         3         3         2         13         1         3         3         3         11         1         3         3         3         1         11         2         2         2         2         4         4         9         1         3         3         1         11         2         2         2         2         1         3         1         11         1         2         2         2         2         0																					
u16068344       48       2       2       3       3       3       2       13       1       3       3       3       1       1       11       2       3       4       9       1       3       1       1       11       2       3       4       9       1       3       3       1       1       11       2       3       4       9       1       3       3       3       3       2       1       1       3																					
u16320985         26         2         2         3         3         3         2         113         1         3         3         3         3         13         2         4         4         10         1         6           u17018534         50         2         0																			_		
U17016534														·					_		
U17029377  44																					
u17030553         0																					
u1705328         50         0																					
U17066736																					
u17102210         33         2         2         3         3         3         2         13         1         3         3         3         3         0 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>_</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>										_											
U17110310         44         2         2         3         3         2         13         1         3         3         3         1         3         3         3         13         2         4         4         10         0         4           u17169811         47         2         2         3         3         3         2         113         1         3         3         3         13         2         4         4         4         10         4         0         0           u18019499         50         2         2         2         2         2         2         13         1         3         3         3         13         2         4         4         4         10         0																					
u17169811       47       2       2       3       3       2       13       1       3       3       3       13       2       4       4       10       4       0         u17229457       43       2       3       3       3       3       2       144       1       3       3       3       13       2       4       4       4       10       0       0         u18019499       50       2       2       2       2       2       2       2       2       2       4       4       4       10       0       0         u1805685       44       2       2       3       3       3       1       1       3       3       3       13       2       4       4       4       10       0       0         u18053239       50       2       2       3       3       3       2       13       1       3       3       3       13       2       4       4       4       10       4       5         u18055215       40       2       2       3       3       3       2       13       1       3										<u> </u>	_										
u17229457       43       2       3       3       3       2       14       1       3       3       3       13       2       4       4       10       2       5         u18019499       50       2       2       2       2       2       10       1       3       3       3       13       2       4       4       10       0       0       0         u1803685       44       2       2       3       3       3       2       113       1       3       3       3       13       2       4       4       4       10       0       0         u18034332       34       2       2       3       3       3       2       13       1       3       3       3       13       2       4       4       4       10       0       0         u18055215       40       2       2       3       3       3       2       13       1       3       3       3       12       4       4       4       10       4       5         u18059661       50       0       2       0       0       0       0 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>1</td><td></td><td></td><td></td><td></td><td></td><td></td><td>4</td><td>4</td><td></td><td></td><td></td></t<>										1							4	4			
u18019499       50       2       2       2       2       2       10       1       3       3       3       13       2       4       4       10       0       0         u18025685       44       2       2       3       3       3       2       13       1       3       3       3       13       2       4       4       10       0       0         u18053239       50       2       2       3       3       3       2       13       1       3       3       3       13       2       4       4       10       0       0         u18055215       40       2       2       3       3       3       2       13       1       3       3       3       12       2       4       4       10       4       5         u18055215       40       2       2       3       3       3       2       13       1       3       3       3       12       2       4       4       4       10       4       5         u180561908       48       2       2       3       3       3       2       13				2		3			13	1	3	3			13		4	4		4	
u18025685       44       2       2       3       3       2       13       1       3       3       3       13       2       4       4       10       2       6         u18034332       34       2       2       3       3       3       2       13       1       3       3       3       13       2       4       4       4       10       0			2	3	3	3	3	2	14	1	3	3	3	3	13	2	4	4	10	2	5
u18034332       34       2       2       3       3       2       13       1       3       3       3       13       2       4       4       4       10       0       0         u18055239       50       2       2       3       3       3       2       13       0       3       3       3       12       2       4       4       4       10       4       5         u18055215       40       2       2       3       3       3       2       13       1       3       3       3       12       2       4       4       4       10       4       5         u18055461       50       0       2       0		50	2	2	2	2	2	2	10	1	3	3	3	3	13	2	4	4	10	0	0
u18053239       50       2       2       3       3       2       13       0       3       3       3       12       2       4       4       10       4       5         u18055215       40       2       2       3       3       3       2       113       1       3       3       3       113       2       4       4       4       10       4       0         u18055461       50       0       2       0 <td></td> <td></td> <td>2</td> <td>2</td> <td></td> <td>3</td> <td></td> <td></td> <td>13</td> <td>1</td> <td>3</td> <td>3</td> <td></td> <td>3</td> <td></td> <td></td> <td>4</td> <td>4</td> <td></td> <td>2</td> <td></td>			2	2		3			13	1	3	3		3			4	4		2	
u18055215       40       2       2       3       3       3       2       13       1       3       3       3       13       2       4       4       4       10       4       0         u18055461       50       0       2       0 </td <td></td> <td>34</td> <td>2</td> <td>2</td> <td>3</td> <td>3</td> <td>3</td> <td>2</td> <td>13</td> <td>1</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>13</td> <td>2</td> <td>4</td> <td>4</td> <td>10</td> <td>0</td> <td>0</td>		34	2	2	3	3	3	2	13	1	3	3	3	3	13	2	4	4	10	0	0
u18055461       50       0       2       0       0       0       2       0		50	2	2	3	3	3	2	13	0	3	3	3	3	12	2	4	4	10	4	5
u18061908       48       2       2       3       3       2       13       1       3       3       3       13       2       4       4       4       10       4       3         u18069704       32       2       2       3       3       3       2       13       1       3       3       3       13       2       4       4       4       0       0       0         u18074074       36       2       2       3       3       3       2       13       1       3       3       3       13       2       4       4       10       0       0         u18080368       38       2       2       3       3       3       2       13       1       3       3       3       13       2       4       4       10       0			2	2	3	3	3	2	13	1	3	3	3	3	13	2	4	4	10	4	0
u18069704       32       2       2       3       3       2       13       1       3 <td< td=""><td></td><td></td><td>0</td><td>2</td><td>0</td><td>0</td><td>0</td><td></td><td>2</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></td<>			0	2	0	0	0		2	0	0	0	0	0	0	0	0	0	0	0	0
u18074074       36       2       2       3       3       2       13       1       3       3       3       13       2       4       4       10       0       0         u18080368       38       2       2       3       3       2       13       1       3       3       3       13       0        0		48	2	2	3	3	3	2	13	1	3	3	3	3	13	2	4	4	10	4	3
u18080368       38       2       2       3       3       2       13       1       3 <td< td=""><td>u18069704</td><td>32</td><td>2</td><td>2</td><td>3</td><td>3</td><td>3</td><td>2</td><td>13</td><td>1</td><td>3</td><td>3</td><td>3</td><td>3</td><td>13</td><td>2</td><td>0</td><td>2</td><td>4</td><td>0</td><td>0</td></td<>	u18069704	32	2	2	3	3	3	2	13	1	3	3	3	3	13	2	0	2	4	0	0
u18105883       50       0	u18074074	36	2	2	3	3	3	2	13	1	3	3	3	3	13	2	4	4	10	0	0
u18108467       44       2       2       3       3       2       13       1       3       3       3       13       2       4       4       10       2       4         u18169253       42       2       2       3       3       2       13       1       3       3       3       13       2       4       4       10       0       0         u1819135       49       2       2       3       3       3       2       13       1       3       3       3       13       2       4       4       10       0       0         u18196366       46       2       2       3       3       3       2       13       1       3       3       3       13       2       4       4       10       0       0         u18219919       50       2       2       3       3       3       2       13       1       3       3       3       13       2       4       4       10       0       0         u18265163       42       2       2       3       3       3       2       13       1       3 <t< td=""><td></td><td>38</td><td>2</td><td>2</td><td>3</td><td>3</td><td>3</td><td>2</td><td>13</td><td>1</td><td>3</td><td>3</td><td>3</td><td>3</td><td>13</td><td>0</td><td>0</td><td>0</td><td>0</td><td>2</td><td>0</td></t<>		38	2	2	3	3	3	2	13	1	3	3	3	3	13	0	0	0	0	2	0
u18169253       42       2       2       3       3       2       13       1       3       3       3       3       3       3       13       2       4       4       4       10       0       0       0         u1819135       49       2       2       3       3       2       13       1       3       3       3       13       2       4       4       4       10       0       0         u18196366       46       2       2       3       3       3       2       13       2       3       3       3       14       2       4       4       10       0       0         u18219919       50       2       2       3       3       2       13       1       3       3       3       13       2       4       4       10       0       0         u18265163       42       2       2       3       3       2       13       1       3       3       3       13       2       4       4       4       10       0       0         u18265250       48       2       2       3       3 <td< td=""><td></td><td></td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td></td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></td<>			0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0
u18191135       49       2       2       3       3       2       13       1       3       3       3       13       2       4       4       10       2       6         u18196366       46       2       2       3       3       2       13       2       3       3       3       14       2       4       4       10       0       0         u18219919       50       2       2       3       3       3       2       13       1       3       3       3       13       2       4       4       10       0       0         u18265163       42       2       2       3       3       3       2       13       1       3       3       3       13       2       4       4       10       0       0         u18265163       42       2       2       3       3       3       2       13       1       3       3       3       13       2       4       4       10       0       0         u18265163       48       2       2       3       3       3       2       13       0       3       <	u18108467	44	2	2	3	3	3	2	13	1	3	3	3	3	13	2	4	4	10	2	4
u18196366       46       2       2       3       3       2       13       2       3 <td< td=""><td>u18169253</td><td>42</td><td>2</td><td>2</td><td>3</td><td>3</td><td>3</td><td>2</td><td>13</td><td>1</td><td>3</td><td>3</td><td>3</td><td>3</td><td>13</td><td>2</td><td>4</td><td>4</td><td>10</td><td>0</td><td>0</td></td<>	u18169253	42	2	2	3	3	3	2	13	1	3	3	3	3	13	2	4	4	10	0	0
u18219919     50     2     2     3     3     2     13     1     3     3     3     13     2     4     4     10     0     0       u18265163     42     2     2     3     3     3     2     13     1     3     3     3     13     2     4     4     10     0     0       u18286250     48     2     2     3     3     3     2     13     0     3     3     3     12     2     4     4     10     3     4						3					3	3					4			2	
u18265163     42     2     2     3     3     3     2     13     1     3     3     3     3     13     2     4     4     10     2     4       u18286250     48     2     2     3     3     2     13     0     3     3     3     12     2     4     4     10     3     4		46	2	2	3	3	3	2	13	2	3	3	3	3	14	2	4	4	10	0	0
u18286250		50	2	2	3	3	3	2	13		1 3	3	3	3	13	2	4	4	10	0	0
	u18265163	42	2	2	3	3	3	2	13	1	3	3	3	3	13	2	4	4	10	2	4
u18312374         47         2         2         3         3         2         13         1         3         3         3         13         2         4         4         10         0         0	u18286250	48	2	2	3	3	3	2	13	0	3	3	3	3	12	2	4	4	10	3	4
	u18312374	47	2	2	3	3	3	2	13	1	3	3	3	3	13	2	4	4	10	0	0

Practical Assignment 0	2																			
	_	SoccerPlayer									Section B:	State and	d Strategy Patte	erns					1	
	TOTAL	Class			State P	attern					Strate	egy Patte	rn				Main		Object	and State Diag
	50	2	2	3	3	3	2	13	1	3	3	3	3	13	2	4	4	10	6	6
	TOTAL	SoccerPlayer class has a name parameter, as well as either getters and setters, or a constructor that sets the name.	Abstract CardState class has pure virtual handle() and change CardState() functions, as well as a getter for the cardColour variable	NoCardState class has a constructor that sets the cardColour variable, as well as a handle function that outputs the appropriate sentence and a changeCardState that returns a new instance of	YellowCardState class has a constructor that sets the cardColour variable, as well as a handle function that outputs the appropriate sentence and a changeCardState that returns a new instance of	RedCardState class has a constructor that sets the cardColour variable, as well as a handle function that outbuts the appropriate sentence and a changeCardState that returns a new instance of	Added CardState private variable to Soccern layer class, as well as a committoul() function that calls the CardState's handle() and changeCardState() functions.	Total	Abstract PlayStyle has pure virtual play() function.	AttackPlayStyle inherits from PlayStyle and implements PlayStyle's play() function, which prints the appropriate string	DefendPlayStyle inherits from PlayStyle and implements PlayStyle's play() function, which prints the appropriate string	PossessionPlayStyle inherits from PlayStyle and implements PlayStyle's play() function, which prints the appropriate string	Added PlayStyle private variable to SoccerPlayer class, as well as a play() function that tests whether a player is on a red card by calling the CardState's getCardColour() function, and either outputs the appriopriate red card statement or calls PlayStyle's	Total	Student created a SoccerPlayer with a given name and playstyle	Student calls the SoccerPlayers committed method to show how the state changes from NoCard to YellowCard to RedCard, and then repeats on this state.	Student calls the SoccerPlayer's play() function to show how a SoccerPlayer outputs different values based on it's PlayStyle strategy. Student also shows how a SoccerPlayer's play() function outputs the appropriate string when a player is on a red card and play() is called.	Total	Correct object dagram with aggregation relationships between SoccerPlayer and its concrete PlayStyle and CardState objects, and having a name value as well. The concrete CardState class must have a valid	Correct state diagram with stating and ending points, as well as states for having not received a card, a decision between receiving a yellow card or a red card based on the severity of a foul, and receiving a red card if a yellow card was received in
u18335412	45	2	2	3	3	3	2	13	1	3	3	3	3	13	0	0	0	0	3	3
u18350110	46	2	3	3	3	3	2	14	1	3	3	3	2	12	2	4	4	10	0	0
u18371435	44	2	2	3	3	3	0	11	1	3	3	3	3	13	0	0	0	0	0	0
u19004232	48	2	2	3	3	3	2	13	1	3	3	3	3	13	2	4	4	10	0	6
u19009977	50	0	2	3	3	3	2	13	1	3	3	3	3	13	2	4	4	10	4	6
u19015951	48	2	2	3	3	3	2	13	1	3	3	3	3	13	2	4	4	10	0	6
u19021209	42	2	2	3	3	3	2	13	1	3	3	3	1	11	C	0	0	0	0	0
u19027372	26	2	2	3	3	2	2	12	1	3	3	3	0	10	2	4	4	10	6	6
u19028815	5	2	0	0	0	0	0	0	0	0	0	0	0	0	2	4	4	10	0	6
u19029242	50	2	2	3	3	3	2	13	1	3	3	3	3	13	2	4	4	10	0	6
u19033347	50	2	2	3	3	3	2	13	1	3	3	3	0	10	2	4	4	10	3	6
u19037717	48	2	2	3	3	3	2	13	1	3	3	3	3	13	2	4	4	10	0	0
u19044233	44	2	2	3	3	3	2	13	1	3	3	3	0	10	0	0	0	0	0	0
u19048280	44	2	2	3	3	3	2	13	1	3	3	3	3	13	2	4	4	10	1	0
u19050993	42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	6
u19053313	50	2	2	3	3	3	2	13	1	3	3	3	3	13	2	4	4	10	1	6
u19061359	50	2	2	3	3	3	2	13	1	3	3	3	3	13	2	4	4	10	5	6
u19062665	43	2	2	3	3	3	2	13	1	3	3	3	3	13	2	4	4	10	4	6
u19068035	43	2	2	3	3	2	0	10	1	3	3	3	3	13	2	0	0	2	5	6
u19068710	43	2	2	3	3	3	2	13	1	3	3	3	3	13	2	4	4	10	4	6
u19068752	50	2	2	3	3	3	2	13	1	3	3	3	3	13	2	4	4	10	0	6
u19072067	0				-	_		0					-	0				0		
u19083786	50	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
u19100133	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
u19103345	50	2	2	3	3	3	2	13	1	3	3	3	3	13	2	4	4	10	3	6
u19116498	44	2	2	3	3	3	2	13	1	3	3	3	3	13	2	4	4	10	6	6
u19123460	50	2	2	3	3	3	2	13	1	3	3	3	3	13	2	4	4	10	6	6
u19126353	50	2	2	3	3	3	2	13	1	3	3	3	3	13	2	4	4	10	3	0
u19130938	50	2	2	3	3	3	2	13	1	3	3	3	3	13	2	4	4	10	0	0
u19141859	50	2	2	3	3	3	2	13	1	3	3	3	3	13	2	4	4	10	0	0
u19151952	0				J	J		0	<del>- '-</del>	-	3		3	0		+ -	7	0	0	<del></del>
u19153113	50	2	2	3	3	3	2	13	1	3	3	3	3	13	2	4	4	10	3	6
u19185032	50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
u19185678	30	2	2	3	3	2	2	U	1	3	3	3	3	U	2	4	4	U	2	6
	50				·			10					3	10				10		
u19198958	50	2	2	3	3	2	2	12	1	3	3	3	3	13	2	4	4	10	2	6

Practical Assignment 0	2											<u> </u>								
		SoccerPlayer									Section B:	State and	d Strategy Patte	erns	1				1	
	TOTAL	Class			State P	attern					Strate	egy Patte	rn				Main		Object	and State Diag
	50	2	2	3	3	3	2	13	1	3	3	3	3	13	2	4	4	10	6	6
	TOTAL	SoccerPlayer class has a name parameter, as well as either getters and setters, or a constructor that sets the name.	Abstract CardState class has pure virtual handle() and changeCardState() functions, as well as a getter for the cardColour variable	NoCardState class has a constructor that sets the cardColour variable, as well as a handle function that outputs the appropriate sentence and a changeCardState that returns a new instance of	YellowCardState class has a constructor that sets the cardColour variable, as well as a handle function that outputs the appropriate sentence and a changeCardState that returns a new instance of	RedCardState class has a constructor that sets the cardColour variable, as well as a handled function that outputs the appropriate sentence and a changeCardState that returns a new instance of	Added CardState private variable to Soccern layer class, as well as a committoul() function that calls the CardState's handle() and changeCardState() functions.	Total	Abstract PlayStyle has pure virtual play() function.	AttackPlayStyle inherits from PlayStyle and implements PlayStyle's play() function, which prints the appropriate string	DefendPlayStyle inherits from PlayStyle and implements PlayStyle's play() function, which prints the appropriate string	PossessionPlayStyle inherits from PlayStyle and implements PlayStyle's play() function, which prints the appropriate string	Added PlayStyle private variable to SoccerPlayer class, as well as a play() function that tests whether a player is on a red card by calling the CardState's getCardColour() function, and either outputs the appriopriate red card statement or calls PlayStyle's	Total	Student created a SoccerPlayer with a given name and playstyle	Student calls the SoccerPlayers committed in method to show how the state changes from NoCard to YellowCard to RedCard, and then repeats on this state.	Student calls the SoccerPlayer's play() function to show how a SoccerPlayer outputs different values based on it's PlayStyle strategy. Student also shows how a SoccerPlayer's play() function outputs the appropriate string when a player is on a red card and play() is called.	Total	Correct object dagram with aggregation relationships between SoccerPlayer and its concrete PlayStyle and CardState objects, and having a name value as well. The concrete CardState class must have a valid	Correct state diagram with stating and ending points, as well as states for having not received a card, a decision between receiving a yellow card or a red card based on the severity of a foul, and receiving a red card if a yellow card was received in
u19214597	39	2	2	3	3	3	2	13	1	3	3	3	3	13	2	4	4	10	0	0
u19228882	44	2	2	3	3	3	2	13	1	3	3	3	3	13		4	4	8	0	0
u19236183	50	2	2	3	3	3	2	13	1	3	3	3	3	13	2	4	4	10	0	6
u19236272	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
u19290498	48	2	2	3	3	3	2	13	1	3	3	3	3	13	2	4	4	10	5	5
u19294418	36	2	2	3	3	3	2	13	1	3	3	3	4	14	3	4	4	11	0	0
u19367211	36	2	0	3	3	3	2	11	0	3	3	3	3	12	2	4	4	10	0	0
u20424622	48	2	2	3	3	3	2	13	1	3	3	3	3	13	2	4	4	10	6	6
u20426799	37	2	0	3	3	3	2	11	1	3	3	3	3	13	2	4	4	10	6	6
u20426918	50	2	2	3	3	3	2	13	1	3	3	3	3	13	2	4	4	10	0	0
u20428082	50	2	2	3	3	3	2	13	1	3	3	3	3	13	2	3	3	8	5	6
u20430168	47	2	2	3	3	3	2	13	1	3	3	3	3	13	2	4	4	10	0	0
u20430516	0				-	-	_	0	<u> </u>			_	_ <u> </u>	0		-	-	0		
u20430630	50	2	2	2	2	2	2	10	1	3	3	3	3	13	2	4	4	10	3	3
u20431997	50	2	2	3	3	3	2	13	1	3	3	3	3	13	2	4	4	10	2	6
u20432748	50	2	2	3	3	3	2	13	1	3	3	3	3	13	2	4	4	10	1	6
u20435780	36	2	0	3	3	3	2	11	1	3	3	3	3	13	2	4	4	10	0	0
u20435992	50	2	2	3	3	3	2	13	1	3	3	3	3	13	2	4	4	10	2	6
u20436077	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
u20437863	48	2	2	3	3	3	2	13	1	3	3	3	3	13	2	4	4	10	2	4
u20438151	0					- 3		0	<del></del>					0		+ -		0		<del>                                     </del>
u20439963	46	2	2	3	3	3	2	13	1	3	3	3	3	13	2	4	4	10	2	3
u20440562	50	2	2	3	3	3	2	13	1	3	3	3	3	13	0	0	0	0	0	0
u20441135	50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
u20441133	50	2	0	3	3	3	2	11	1	3	3	3	3	13	2	4	4	10	0	6
u20443260	36	2	2	3	3	3	2	13	1	3	3	3	3	13	2	4	4	10	4	4
u20443626	48	2	0	3	3	3	2	11	1	3	3	3	3	13	2	4	4	10	6	6
u20444738	49	2	0	3	3	3	2	11	1	3	3	3	3	13	2	3	3	8	0	6
u20444736 u20448474	36		0	3	3	3	2	11	1	3	3	3	3	13	0	0	0	0	0	0
u20446474 u20450533		2		3	3		2						3				4		1	
u20450533 u20450932	48	2	2			3		13	1	3	3	3		13	2	4		10		5 6
u20450932 u20453222	40	2	2	3	3	3	1	12	1	3	3	3	3	13	2	2	2	7	0	
	48	2	2	3	3	3	2	13	1	3	3	3	3	13	2	2	3	•	1	6
u20453478	44	2	2	2	2	3	2	11	1	3	3	3	3	13	2	4	4	10	3	4
u20456078	36	2	2	3	3	3	2	13	1	3	3	3	3	13	2	4	4	10	0	0
u20460067	50	2	2	2	2	2	2	10	1	3	3	3	3	13	2	4	4	10	3	5

Practical Assignment	)2										Section B	State and	d Strategy Patte	erns						
		SoccerPlayer												1110						
	TOTAL 50	Class			State P			10				egy Patter		- 10			Main	- 10		and State Diag
	50	<b>2</b> σ .	2	3		3	<b>2</b>	13	1	3	3		g 0	13	2	4	4 0 B	10	6 0 0 D	6
	TOTAL	SoccerPlayer class has a name parameter, as well as either getters and setters, or a constructor that sets the name.	Abstract CardState class has pure virtual handle() and change CardState() functions, as well as a getter for the cardColour variable	NoCardState class has a constructor that sets the cardColour variable, as well as a handle function that outputs the appropriate sentence and a changeCardState that returns a new instance of	YellowCardState class has a constructor that sets the cardColour variable, as well as a handle function that outputs the appropriate sentence and a changeCardState that returns a new instance of	RedCardState class has a constructor that sets the cardColour variable, as well as a handle function that outputs the appropriate sentence and a change-CardState that returns a new instance of	Added CardState private variable to Soccern layer class, as well as a committoul() function that calls the CardState s handle() and changeCardState() functions.	Total	Abstract PlayStyle has pure virtual play() function.	AttackPlayStyle inherits from PlayStyle and implements PlayStyle's play() function, which prints the appropriate string	DefendPlayStyle inherits from PlayStyle and implements PlayStyle's play() function, which prints the appropriate string	PossessionPlayStyle inherits from PlayStyle and implements PlayStyle's play() function, which prints the appropriate string	Added PlayStyle private variable to SoccerPlayer class, as well as a play() function that tests whether a player is on a red card by calling the CardState's getCardColour() function, and either outputs the appropriate red card statement or calls PlayStyle's	Total	Student created a SoccerPlayer with a given name and playstyle	Student calls the SocoetPlayer's committ-our method to show how the state changes from NoCard to YellowCard to RedCard, and then repeats on this state	Student calls the SoccetPlayer's play() function to show how a SoccetPlayer outputs different values based on it's PlayStyle strategy. Student also shows how a SoccetPlayer's play() function outputs the appropriate string when a player is on a red card and play() is called.	Total	Correct object dagram with aggregation relationships between SoccerPlayer and its concrete PlayStyle and CardState objects, and having a name value as well. The concrete CardState class must have a valid	Correct state diagram with starting and ending points, as well as states for having not received a card, a decision between receiving a yellow card or a red card based on the severity of a foul, and receiving a red card if a yellow card was received in
u20460687	36	2	2	3	3	3	2	13	1	3	3	3	3	13	0	0	0	0	0	0
u20463163	50	2	2	3	3	3	2	13	1	3	3	3	3	13	2	0	0	2	3	3
u20465026	50	2	2	3	3	2	2	12	1	3	3	3	3	13	2	4	4	10	5	6
u20466570	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
u20468203	50	2	2	3	3	2	2	12	1	3	3	3	3	13	2	4	4	10	0	0
u20469366	44	2	2	3	3	2	2	12	1	3	3	3	3	13	2	4	4	10	3	6
u20471582	40	2	2	3	3	2	2	12	1	3	3	3	3	13	2	4	4	10	3	1
u20478144	16	2	2	3	3	2	2	12	1	0	0	0	3	4	0	0	0	0	0	0
u20479884	50	2	2	3	3	2	2	12	1	3	3	3	3	13	2	4	4	10	1	6
u20481218	40	2	2	3	3	2	2	12	1	3	3	3	3	13	2	4	2	8	1	6
u20486783	29	2	2	3	3	2	2	12	1	3	3	3	3	13	2	4	4	10	3	3
u20491141	50	2	2	3	3	2	2	12	1	3	3	3	3	13	2	4	4	10	3	6
u20494166	50	2	2	3	3	3	2	13	1	3	3	3	4	14	3	4	4	11	6	0
u20494654	48	2	2	3	3	2	2	12	1	3	3	3	3	13	2	4	4	10	3	6
u20498510	50	2	2	3	3	3	2	13	1	3	3	3	3	13	2	4	4	10	4	4
u20502126	25	2	2	3	3	3	2	13	1	3	3	3	3	13	2	4	4	10	4	4
u20504552	49	2	2	3	3	2	2	12	1	3	3	3	3	13	2	4	4	10	1	3
u20506237	50	2	2	3	3	2	2	12	1	3	3	3	3	13	2	4	4	10	4	6
u20507102	41	2	2	3	3	2	2	12	1	3	3	3	3	13	2	4	4	10	4	2
u20513667	31	2	2	3	3	2	2	12	1	3	3	3	3	13	0	0	0	0	4	4
u20519517	50	2	2	3	3	2	2	12	1	3	3	3	3	13	2	4	4	10	0	0
u20522623	36	2	2	3	3	3	2	13	1	3	3	3	3	13	2	4	4	10	0	0
u20528036	50	2	2	3	3	2	2	12	1	3	3	3	3	13	2	3	4	9	2	4
u20528834	40	2	2	3	3	2	2	12	1	3	3	3	3	13	0	0	0	0	1	5
u20529440	39	2	2	3	3	2	2	12	1	3	3	3	3	13	0	0	0	0	0	0
u20532581	40.5	2	2	3	3	2	2	12	1	3	3	3	3	13	2	4	3	9	3	0
u20534541	49	2	2	3	3	2	2	12	1	3	3	3	3	13	2	4	4	10	4	6
u20536951	44	2	2	3	3	3	2	13	1	3	3	3	3	13	2	4	2	8	2	5
u20538945	39	2	2	3	3	2	2	12	1	3	3	3	3	13	0	0	0	0	0	1
u20554240	39	2	2	3	3	2	2	12	1	3	3	3	3	13	0	0	0	0	3	3
u20556455	50	2	2	3	3	2	2	12	1	3	3	3	3	13	2	4	4	10	2	6
u20557622	50	2	2	3	3	2	2	12	1	3	3	3	3	13	2	4	4	10	3	6
u20573783	42	2	1	3	3	3	2	12	1	3	3	3	3	13	0	0	0	0	0	0
u20575085	50	2	2	3	3	2	2	12	1	3	3	3	3	13	2	4	4	10	2	3
u20578688	44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		-														· -	·			

Tructical Assignment										5	ection B:	State and	Strategy Patte	rns						
	TOTAL	SoccerPlayer Class			State F	lattarn					Strata	gy Patter	_				Main		Object	and State Diag
	50	2	2	3			2	13	1	3	3	gy Faller 3	3	13	2	1		10	6	6
	30			± =		. =		13			Ţ.		a	13		-	s p			
	TOTAL	SoccerPlayer class has a name parameter, as well as either getters and setters, or a constructor that sets the name.	Abstract CardState class has pure virtual handle() and changeCardState() functions, as well as a getter for the cardColour variable	NoCardState class has a constructor that sets the cardColour variable, as well as a handle function that outputs the appropriate sentence and a changeCardState that returns a new instance of	YellowCardState class has a constructor that sets the cardColour variable, as well as a handle function that outputs the appropriate sentence and a change CardState that returns a new instance of	RedCardState class has a constructor that sets the cardColour variable, as well as a handle function that outputs the appropriate sentence and a changeCardState that returns a new instance of	Added CardState pnivat class, as well as a commit CardState's handle() fun.	Total	Abstract PlayStyle has pure virtual play() function.	AttackPlayStyle inherits from PlayStyle and implements PlayStyle's play() function, which prints the appropriate string	DefendPlayStyle inherits from PlayStyle and implements PlayStyle's play() function, which prints the appropriate string	PossessionPlayStyle inherits from PlayStyle and implements PlayStyle's play() function, which prints the appropriate string	Added PlayStyle private variable to SoccerPlayer class, as well as a play() function that tests whether player is on a red card by calling the CardState's getCardColour() function, and either outputs the appropriate red card statement or calls PlayStyle's	Total	Student created	Student calls the SoccerPlayer's committed method to show how the state changes from NoCard to YellowCard to RedCard, and then repeats on this state.	Student calls the SoccerPlayer's play() function to show how a SoccerPlayer outputs different values based on it's PlayStyle strategy. Student also shows how a SoccerPlayer's play() function outputs the appropriate string when a player is on a red card and play() is called.	Total		Correct state diagram with starting and ending points, as well as states for having not received a card, a decision between receiving a yellow card or a red card based on the severity of a foul, and receiving a red card if a yellow card was received in
u20581018	50	2	2	3	3	2	2	12	1	3	3	3	3	13	2	4	4	10	2	2
u20592061	44	2	2	3	3	3	2	13	1	3	3	3	3	13	2	4	4	10	2	4
u20632429	50	2	2	3	3	3	2	13	1	3	3	3	3	13	2	4	4	10	6	6
u20646284	50	2	2	3	3	3	2	13	1	3	3	3	3	13	2	4	4	10	6	6
u20660652	45	2	2	3	3	3	2	13	1	3	3	3	3	13	2	4	4	10	3	6
u20662302	50	2	2	3	3	3	2	13	1	3	3	3	3	13	2	4	4	10	5	6
u20692286	49	2	2	3	3	3	2	13	1	3	3	3	3	13	2	4	4	10	6	6
u20734621	45	2	2	3	3	2	2	12	1	3	3	3	3	13	2	4	4	10	4	5
u20780479	50	2	2	3	3	2	2	12	1	3	3	3	3	13	2	4	2	8	0	0

Table   Tabl				
12   50   100		rams		Final Mark
U04483716 12 50 94 U04515146 6 44 70 U04534205 0 0 11 U15223893 4 41 91 U15231748 10 44 92 U16068344 4 39 87 U1608344 9 34 84 U17029377 11 49 93 U17030553 0 0 0 0 U17053928 0 0 0 50 U17066736 6 44 94 U1710210 3 41 74 U17110310 4 42 86 U17169811 4 42 89 U17229457 7 46 89 U18019499 0 35 85 U1805685 8 46 90 U18034332 0 38 72 U18053239 9 46 96 U18034332 0 38 72 U18055215 4 42 82 U18055461 0 2 52 U18055461 0 2 52 U18065704 0 32 64 U18074074 0 38 74 U18074074 0 38 74 U18074074 0 38 74 U18074074 0 38 74 U18080368 2 30 68 U18105883 0 0 50 U18108467 6 44 88 U18169253 0 38 80				
U04483716       12       50       94         U04575146       6       44       70         U04534205       0       0       11         U15223893       4       41       91         U15231748       10       44       92         U16068344       4       39       87         U17016534       9       34       84         U17029377       11       49       93         U17030553       0       0       0         U17066736       6       44       94         U17102210       3       41       74         U17110310       4       42       86         U17229457       7       46       89         U18019499       0       35       85         U18053239       9       46       96         U18053239       9       46       96         U18055215       4       42       82         U18069704       0       32       64         U18074074       0       38       74         U1810883       0       0       50         U181088467       6       44       88 <th></th> <th></th> <th></th> <th>100</th>				100
u04515146         6         44         70           u04534205         0         0         11           u15223893         4         41         91           u15231748         10         44         92           u16068344         4         39         87           u16320965         7         45         71           u17016534         9         34         84           u17029377         11         49         93           u17030553         0         0         0         0           u17066736         6         44         94           u17102210         3         41         74           u17169811         4         42         86           u17029457         7         46         89           u18019499         0         35         85           u18053239         9         46         96           u18053239         9         46         96           u18069704         0         32         64           u18069704         0         32         64           u18074074         0         38         74           u18105883<		Total	TOTAL	FINAL MARK
u04515146         6         44         70           u04534205         0         0         11           u15223893         4         41         91           u15231748         10         44         92           u16068344         4         39         87           u16320965         7         45         71           u17016534         9         34         84           u17029377         11         49         93           u17030553         0         0         0         0           u17066736         6         44         94           u17102210         3         41         74           u17169811         4         42         86           u17029457         7         46         89           u18019499         0         35         85           u18053239         9         46         96           u18053239         9         46         96           u18069704         0         32         64           u18069704         0         32         64           u18074074         0         38         74           u1810883 </td <td>u04483716</td> <td>12</td> <td>50</td> <td>0.4</td>	u04483716	12	50	0.4
u04534205         0         0         11           u15223893         4         41         91           u15231748         10         44         92           u16068344         4         39         87           u17016534         9         34         84           u17029377         11         49         93           u17030553         0         0         0         0           u17053928         0         0         50           u17066736         6         44         94           u17102210         3         41         74           u17169811         4         42         86           u17229457         7         46         89           u18019499         0         35         85           u18052685         8         46         90           u18053239         9         46         96           u18055215         4         42         82           u18069704         0         32         64           u18074074         0         38         74           u18080368         2         30         68           u18105883 </td <td></td> <td></td> <td></td> <td></td>				
u15223893         4         41         91           u15231748         10         44         92           u1608344         4         39         87           u16320965         7         45         71           u17016534         9         34         84           u17029377         11         49         93           u17053928         0         0         0           u17066736         6         44         94           u17102210         3         41         74           u17110310         4         42         86           u17129457         7         46         89           u18019499         0         35         85           u18025685         8         46         90           u18053239         9         46         96           u18055215         4         42         82           u18069704         0         32         64           u18080368         2         30         68           u1810883         0         0         50           u18108467         6         44         88           u18169253         0 <td></td> <td></td> <td></td> <td></td>				
u15231748         10         44         92           u16068344         4         39         87           u16320965         7         45         71           u17016534         9         34         84           u17029377         11         49         93           u17030553         0         0         0         0           u17053928         0         0         50           u17066736         6         44         94           u17102210         3         41         74           u17110310         4         42         89           u1769811         4         42         89           u18019499         0         35         85           u18025685         8         46         90           u18034332         0         38         72           u18053239         9         46         96           u18055215         4         42         82           u18061908         7         45         93           u18069704         0         32         64           u18080368         2         30         68           u18105883 </td <td></td> <td></td> <td></td> <td></td>				
u16068344         4         39         87           u16320965         7         45         71           u17016534         9         34         84           u17029377         11         49         93           u17030553         0         0         0         0           u17066736         6         44         94           u17102210         3         41         74           u17169811         4         42         86           u17229457         7         46         89           u18019499         0         35         85           u180534332         0         38         72           u18055215         4         42         86           u18069704         0         2         52           u18069704         0         32         64           u18080368         2         30         68           u18105883         0         0         50           u181069253         0         38         80				
u16320965         7         45         71           u17016534         9         34         84           u17029377         11         49         93           u17030553         0         0         0         0           u17053928         0         0         50         0         0         50           u17066736         6         44         94         <				
u17029377         11         49         93           u17030553         0         0         0           u17053928         0         0         50           u17066736         6         44         94           u17102210         3         41         74           u17110310         4         42         86           u17129457         7         46         89           u18019499         0         35         85           u18025685         8         46         90           u18034332         0         38         72           u18053239         9         46         96           u18055215         4         42         82           u18061908         7         45         93           u18069704         0         32         64           u18080368         2         30         68           u18105883         0         0         50           u18106467         6         44         88           u18169253         0         38         80	u16320965	7		
u17029377         11         49         93           u17030553         0         0         0         0           u17053928         0         0         0         50           u17066736         6         44         94           u17102210         3         41         74           u17110310         4         42         86           u17169811         4         42         89           u17229457         7         46         89           u18019499         0         35         85           u18025685         8         46         90           u18034332         0         38         72           u18053239         9         46         96           u18055215         4         42         82           u18061908         7         45         93           u18069704         0         32         64           u18080368         2         30         68           u18105883         0         0         50           u181068467         6         44         88           u18169253         0         38         80		9		
u17053928         0         0         50           u17066736         6         44         94           u17102210         3         41         74           u17110310         4         42         86           u17169811         4         42         89           u18019499         0         35         85           u18025685         8         46         90           u18034332         0         38         72           u18053239         9         46         96           u18055215         4         42         82           u18061908         7         45         93           u18069704         0         32         64           u18074074         0         38         74           u18080368         2         30         68           u18105883         0         0         50           u181069253         0         38         80	u17029377	11	49	
u17066736         6         44         94           u17102210         3         41         74           u17110310         4         42         86           u17169811         4         42         89           u17229457         7         46         89           u18019499         0         35         85           u18025685         8         46         90           u18053239         9         46         96           u18055215         4         42         82           u18055461         0         2         52           u18061908         7         45         93           u18074074         0         32         64           u18080368         2         30         68           u18105883         0         0         50           u181069253         0         38         80	u17030553	0	0	0
u17102210         3         41         74           u17110310         4         42         86           u17169811         4         42         89           u17229457         7         46         89           u18019499         0         35         85           u18025685         8         46         90           u18034332         0         38         72           u18053239         9         46         96           u18055215         4         42         82           u18065461         0         2         52           u18069704         0         32         64           u18074074         0         38         74           u18080368         2         30         68           u18105883         0         0         50           u18108467         6         44         88           u18169253         0         38         80	u17053928	0	0	50
u17110310         4         42         86           u17169811         4         42         89           u17229457         7         46         89           u18019499         0         35         85           u18025685         8         46         90           u18034332         0         38         72           u18053239         9         46         96           u18055215         4         42         82           u18061908         7         45         93           u18069704         0         32         64           u18074074         0         38         74           u1805883         0         0         50           u18108467         6         44         88           u18169253         0         38         80	u17066736	6	44	94
u17169811         4         42         89           u17229457         7         46         89           u18019499         0         35         85           u18025685         8         46         90           u18034332         0         38         72           u18053239         9         46         96           u18055215         4         42         82           u18055461         0         2         52           u18069704         0         32         64           u18074074         0         38         74           u18080368         2         30         68           u18105883         0         0         50           u18108467         6         44         88           u18169253         0         38         80	u17102210	3	41	74
u17229457         7         46         89           u18019499         0         35         85           u18025685         8         46         90           u18034332         0         38         72           u18053239         9         46         96           u18055215         4         42         82           u18055461         0         2         52           u18061908         7         45         93           u18069704         0         32         64           u18074074         0         38         74           u18080368         2         30         68           u18105883         0         0         50           u18108467         6         44         88           u18169253         0         38         80	u17110310	4	42	86
u18019499         0         35         85           u18025685         8         46         90           u18034332         0         38         72           u18053239         9         46         96           u18055215         4         42         82           u18055461         0         2         52           u18061908         7         45         93           u18069704         0         32         64           u18074074         0         38         74           u18080368         2         30         68           u18105883         0         0         50           u18108467         6         44         88           u18169253         0         38         80	u17169811	4	42	89
u18025685         8         46         90           u18034332         0         38         72           u18053239         9         46         96           u18055215         4         42         82           u18055461         0         2         52           u18061908         7         45         93           u18069704         0         32         64           u18074074         0         38         74           u18080368         2         30         68           u18105883         0         0         50           u18108467         6         44         88           u18169253         0         38         80	u17229457	7	46	89
u18034332         0         38         72           u18053239         9         46         96           u18055215         4         42         82           u18055461         0         2         52           u18061908         7         45         93           u18069704         0         32         64           u18074074         0         38         74           u18080368         2         30         68           u18105883         0         0         50           u18108467         6         44         88           u18169253         0         38         80	u18019499	0	35	85
u18053239     9     46     96       u18055215     4     42     82       u18055461     0     2     52       u18061908     7     45     93       u18069704     0     32     64       u18074074     0     38     74       u18080368     2     30     68       u18105883     0     0     50       u18108467     6     44     88       u18169253     0     38     80	u18025685	8	46	90
u18055215     4     42     82       u18055461     0     2     52       u18061908     7     45     93       u18069704     0     32     64       u18074074     0     38     74       u18080368     2     30     68       u18105883     0     0     50       u18108467     6     44     88       u18169253     0     38     80	u18034332	0	38	72
u18055461     0     2     52       u18061908     7     45     93       u18069704     0     32     64       u18074074     0     38     74       u18080368     2     30     68       u18105883     0     0     50       u18108467     6     44     88       u18169253     0     38     80		9	46	96
u18061908     7     45     93       u18069704     0     32     64       u18074074     0     38     74       u18080368     2     30     68       u18105883     0     0     50       u18108467     6     44     88       u18169253     0     38     80		4	42	82
u18069704     0     32     64       u18074074     0     38     74       u18080368     2     30     68       u18105883     0     0     50       u18108467     6     44     88       u18169253     0     38     80				
u18074074     0     38     74       u18080368     2     30     68       u18105883     0     0     50       u18108467     6     44     88       u18169253     0     38     80				
u18080368     2     30     68       u18105883     0     0     50       u18108467     6     44     88       u18169253     0     38     80				
u18105883     0     0     50       u18108467     6     44     88       u18169253     0     38     80				
u18108467     6     44     88       u18169253     0     38     80				
u18169253 0 38 80				
U   B   46   95				
u18196366         0         39         85           u18219919         0         38         88				
u18286250     7     44     92       u18312374     0     38     85				
0   30   65	u 10012014	U	30	00

•			
	rams		Final Mark
	12	50	100
	Total	TOTAL	FINAL MARK
u18335412	6	34	79
u18350110	0	38	84
u18371435	0	26	70
u19004232	6	44	92
u19009977	10	46	96
u19015951	6	44	92
u19021209	0	26	68
u19027372	12	46	72
u19028815	6	18	23
u19029242	6	44	94
u19033347	9	44	94
u19037717	0	38	86
u19037717 u19044233			
u19044233	0	25	69
u19050993		39	83
u19053313	8	8 45	50
u19061359	7 11	49	95 99
u19061559			
u19062665 u19068035	10 11	48 38	91 81
u19068710			_
u19068752	10	48 44	91
u19066752 u19072067	6		94
	0	0	0
u19083786	0	2	52
u19100133	0	0	18
u19103345	9	47	97
u19116498	12	50	94
u19123460	12	50	100
u19126353	3	41	91
u19130938	0	38	88
u19141859	0	38	88
u19151952	0	0	0
u19153113	9	47	97
u19185032	0	0	50
u19185678	8	10	10
u19198958	8	45	95

Tams   Final	7 0
u19214597     0     38     7       u19228882     0     36     8       u19236183     6     44     9       u19230272     0     0     6       u19290498     10     48     9	7 0
u19214597     0     38     7       u19228882     0     36     8       u19236183     6     44     9       u19236272     0     0     6       u19290498     10     48     9	7 0
u19214597     0     38     7       u19228882     0     36     8       u19236183     6     44     9       u19236272     0     0     6       u19290498     10     48     9	7
u19228882     0     36     8       u19236183     6     44     9       u19236272     0     0     6       u19290498     10     48     9	0
u19228882     0     36     8       u19236183     6     44     9       u19236272     0     0     6       u19290498     10     48     9	0
u19236183     6     44     9       u19236272     0     0     6       u19290498     10     48     9	
u19236272     0     0     6       u19290498     10     48     9	4
u19290498 10 48 9	
u19367211 0 35 7	
u20426918         0         38         8           u20428082         11         47         9	
<b>u20430516</b> 0 0 0	
u20430630 6 41 9	
u20431997 8 46 9	
u20432748 7 45 9:	
u20435780 0 36 7:	
u20435992     8     46     9       u20436077     0     0     2	
u20437863 6 44 9.	
<b>u20438151</b> 0 0 0	
u20439963 5 43 8	
u20440562 0 28 7	_
u20441135 0 0 5	
u20442018 6 42 9	
u20443260 8 46 8.	
u20443626 12 48 9	
u20444738 6 40 8	
u20448474 0 26 6	
u20450533 6 44 9:	
u20450932 6 39 7	
u20453222 7 42 9	_
u20453478 7 43 8	
u20456078 0 38 7-	
u20460067 8 43 9	3

Fractical Assignment 02						
	rams		Final Marl			
	12	50	100			
	Total	TOTAL	FINAL MARK			
u20460687	0	28	64			
u20463163	6	36	86			
u20465026	11	48	98			
u20466570	0	0	24			
u20468203	0	37	87			
u20469366	9	46	90			
u20471582	4	41	81			
u20478144	0	18	34			
u20479884	7	44	94			
u20481218	7	42	82			
u20486783	6	43	72			
u20491141	9	46	96			
u20494166	6	46	96			
u20494654	9	46	94			
u20498510	8	46	96			
u20502126	8	46	71			
u20504552	4	41	90			
u20506237	10	47	97			
u20507102	6	43	84			
u20513667	8	35	66			
u20519517	0	37	87			
u20522623	0	38	74			
u20528036	6	42	92			
u20528834	6	33	73			
u20529440	0	27	66			
u20532581	3	39	79.5			
u20534541	10	47	96			
u20536951	7	43	87			
u20538945 u20554240	1	28	67			
u20554240 u20556455	6	33	72			
u20557622	8 9	45 46	95 96			
u2057622 u20573783	0	27	69			
u20575765 u20575085	5	42	92			
u20578688	0	0	44			
u20070000	0	0	77			

	rams	ı	Final Mark	
	12	50	100	
	Total	TOTAL	FINAL MARK	
u20581018	4	41	91	
u20592061	6	44	88	
u20632429	12	50	100	
u20646284	12	50	100	
u20660652	9	47	92	
u20662302	11	49	99	
u20692286	12	50	99	
u20734621	9	46	91	
u20780479	0	35	85	