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	TOLYMORPHISM
	Poly + Marhhiem
	Poly + Morphism
	Run time compile time
	Run time Compile time
	violal function
	Operator function overloading.
	overloading overloading.
- Train	V V
1	It is made up of two words Poly and
	morphism where poly meaths many
	and modphism means forms
<i>a</i>	Polymorphism is a sessuial technique of
	- BOYS
	Polymorphism occurs when there is a
	niemarchy of classes and they are related
	There are two types of Polymorphism
n.	1. Compile time
	2 Run time
	Management of the state of the
*	Compile iteme polymorphism is executed
	and implemented using overloading
	(Function and operator) where as run
	time polymorphism is implemented
	using virtual Junction.

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	COMPILE TIME POLYMORPHISM	
(•)	Function overloading	
	It is a technique in which a progra	im
	can have functions with same name	
	but different organiente (in ter	ms
	can have functions with same name but different orguments (in ter of number or types).	
(·)	Operator eveloading	
		-
<u> </u>	It us a technique where an operat	9 7
	can be represented and reused as	
	many times as a program demande	
, e-vio	To define the tack of an operator we must specify what ut means un relation to the class to which	2
<u> </u>	must specify what it means un	1
	relation to the class to which	
. · ·	the operator is applied.	
	This is done with the help of a	
	special function called operator	ο,
	function which describe the task to	OLL.
	RUN TIME POLYMORPHISM	
4.1	were the second to the second	7
(e)	Virtual function	10 July 10 Jul
		7,200
	It is a technique of polymosphism use	dto
	implement men time polynon orphism who	re
	It is a technique of polymosphism use implement sun time polymosphism who a member function of a class is	<u>. </u>
	v D	
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	Tohussend.	1 Linetia	n ushich d	. D & 1
	not occupies only at the	any memo	my but es	eist
	only at the	Voun	Utime.	
	Virtual function ic	an be invi	oked using	
	arrow operator	. C++	supporte	0 9
	mechanism in	which, a	t our time	
. 3.236	the class objects	e are uno	le considerat	len
4	and the appropria	te version	of function	n us
151612	invoked Sin	ce the fur	rction is	unka
A STATE OF THE STA	with a partie	llar class	much later	after
	the compilation	This 1	process is	``
	termed as 11	ATE BINDI	NOI and	
	is also know	an as D	ynamic bir	nding
	because the sel	ection of	The	,
Yes,	appropriate func	ction is	done dyna	mically
	at sun time.	o ny adiostr	, y y U	v
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	N. Western	and the	S. MESTALBUR	
	· The state of the	S. 2 ⁴⁶⁹		<u> </u>
The second	and any other		7.	
16		and the state of the state of		(a)
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			60 A A	
erels.	as to see a second		4	

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	OPERATOR OVERLOADING	
	# unclude < joshream.h>	
	# include < conio h>	
	class abc	
	3	<u> </u>
سمه	kublic :	\rightarrow
	int rollno)	
	Char grade;	
	float marks;	
	June 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
	abc (int m, char n, float g)	
<u> </u>	2	
·	rollno = m;	
	grade = n;	
<u> </u>	mark = g	,
1	- 10. 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
	void operator ++ (int)	
	Sobore months with the	
<u>.</u>	rollno = rollno + 1;	
	grade = grade +1;	
	grade = grade +1; marks = marks +1;	
	?	
	3,	
	int main ()	
	3	
	abe s (22, 1 a1, 20.1)	
	cout « " Before oucloading "« s. rollno « s. grade « s. mark; S++;	
	« signade «siman,	
	cout << " Afla overloading " << 5. vollno <	cs. go de de
The Market		Seat Seat Seat Seat Seat Seat Seat Seat

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	s.maeks;
	aetch():
	getch();
	VIRTUAL FUNCTION
*	Rules for violual function:
1)	It a member In which is redefined
	Its a member in which is redefined on the derived class and the
	In can be ouersidden.
2)	Violual function can-not be static 2 also cannot be friend of another class.
	also cannot be friend of another
	class.
-2	
3)	Should be accessed using pointer or reference to achieuse our time
	should be accessed tising pointer
	or reference to acretice sun-time
	polymorphism.
4)	91 use have vistage dunction & cit us
	I we have vistual function 2 it is Doversidden in derived class then we do not need vistual keyword in the
	do not need virtual keyword in the
	derived class.
<u>క</u>)	A base class pointer can point to the
	A base class pointer can point to the object of base class as well as to the object of derived class.
	to the object of derived class.
<u>te «.</u>	0 0

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6)	for invoking a virtual not need dot operate voiel use amow opera	function, use do
	not need dot speeate	r instead we
	usiel use amow open	ator (->)
	Waa aa	
	#	
	# class base	
	\$	
,	public:	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	public: vistual void show ()	
	\$	
	cout « " We are in	derived class"
	3 2 100000	bask
	l Y control of chance	1 2 1 2
	int main () cout a " we a	u m der ved cress";
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	11 2 a small set there	
	base * b;	
TO CONTROL OF THE FAMILY OF TH	derived d;	
1	b = 2d;	
	b -> show ();	
	getch(); return 0;	
	rekim 0;	
	3	
	Le Transport Control of the Control	TIV The
3.4		
	he he had being	
	H.F. H.	

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			control de del Baric completo (option professor de professor de qualificações de professor de qualificações de	
	Inheritance is a feature	of 00P	3 (Obje	ct
	Oriented programming	system)	which	
	Oriented programming allows the eveation with desiration of its	b (base)	w class	A
4	with desiration of its	own	year its	
	and allows child c	COM FO TIL		
	own unique Jeatures			
	This is basically done by	, veatin	g new	
	classes and reusing	the p	ropentis	
	This is basically done by classes and reusing one.			2
1	The mechanism of downing) o know	n as	
	Inheritance.			
	Type of Inheritance		}	
	and)			
1)	single level Inheutance	-		
3-6	A			
	V	,p.y.		
2)	Multi-level Inheutance			
	A			
	44	1 (1) (1) (1) (1) (1) (1) (1) (1) (1) (1		

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3)	Multiple Inheutance	
	1 Millia Hill	
\$	AB	
	my and the control of	
	C C	
(4)	Hierarchical inheritance	
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- wir	B C	
(5)		
	Hybrid Inheutance	
	A B Solver	
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	01.487 EM1.(1) (14.4) 3 ()	
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