Ayush Vinod Upadhyay TORS I1-1

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	Experiment no 10.
25 : 2.4	the effective and the sound of the surface of the first sound of the s
1	Evaluation of x-86 architecture code
,	a) 8080 - It. was world's first general purpose micro-
ver a 1 ft. s	processor. It was a 8-bit machine withor an 8 bit data path
	memory. It was used in the first personal computer.
-	Corp. It is the first force mers or cessed with allo
20017 70	. 6) 8086c: It was 16 bit - machina l'and was le fare more powerful that
	the previous one. It had a wider data path of 16 bits and larger
	registers along with an instruction cache or queue.
	estamental to supply some first
	c) 80286: It has an addressable memory of illomb instead of 1mb
	and contains 2 modes - real mode and first generation 16 bit
	protected mode.
at accept	Dans The Bernard Control of the 22 this and the 22
- PC 1 757 1 (C L 1 7	a) 8036 - It was cintel's first 32-bit machine Due to it's 32
, 1	hit architecture: it was able to compute against the complexity of
· 11	and power of micro computers and analymainforms introduced!
	e) 80486: It introduced the account of accucine technology and
	instruction pipeline. It contained a white protect feature and
	offered a built -in-feature. That off laded complex! with math
2 C - 5 m C -	operation from the CPU.
	- Comment and content to a 19,00
	f) Pentium: The use of super scaler technique was introduced as
14/14	multiple instruction started executing in paralleline 1:
100 121 41	sty water at man of marginary after mini neithers has i
ar rintin	9) Pentium Pro: - It's used register remaining, branch prediction
	data flow analysis, speculative execution and more pipeline
(Sundaram)	stages.
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	(h) Pentium II: It was able to process video, audio and graphics
	data oficially by incorporating Intel MMX technology.
	(i) Pentium III It contains 5MD and support 3D graphic software.
	(j) Core: It is the first Intel microprocessor with dual core which is the implementation of 2 processor on single
>	chip.
00	There are a types of interrupts.
	1) Hardware interupts.
* 1	1) Hardware Interopts:- It is caused by any peripheral device by sending a signal through a specified pin to the microprocessor.
	NM1:- It is a single non-maskable interupt pin having higher priority from the maskable interupt request pin (INTR) and
	it's as of Type 2 interupt in
- /	me me de la companya
	INTA: The INTR is a muskubles interest because the micro-
	processor will be implemented only if interrupts are enabled
	Using set in krupt flag instruction.
	a) Software Interrupts: - Some instructions are inserted at the
	desired position into the program to acate intercepts. Those can
	be used to test the working of rairious instructions that interrupts
	handless. This includes INT, INT-3 and INTO.
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The second	
94	INT: This is interrupt instructions with type number. It is a 2-byte
ν	instruction. First byte provides the OP-code and second byte provides
10,101,	the intercopt type number. a. (4)
e sie	a community to the particle on the at the particle
	INT 3: - Break point Interrupt of Instruction - It is all-byte
hop , o.	instruction having OP-code in CCH. These instructions are inserted
67.	into the program so that when the processor readies there then it
ئ، ر	stops - me normal execution. See Ull adjusted instrumental
	in a language.
	INTO :- This is interupt an overflow instruction. Its a bayte.
2.10.1.117	instruction and the Heir mnemonica INTO - The Of-code for this
	instruction is CEH. State State
	Commande Conno Land
97	Short note: Direct Memory Access.
	Direct Memory Access occurs when the processor only has to
5	-initiate the data transfer and the DMA controller takes ones to complete
	rit. This central method is very fast compared to programmed and
	interrupt driven I/O, and also move efficient because it
	requires minimal processorano invalument.
1 94	Explain following parts of CPD in detail no cosino como como como como como como como co
12.0101	a sol DiALUser and or retrieve to remainured out TI
	2) Registor Organisation :
det my	store twenth was pen - waster transfeld mapped.
9 (Dema din the notice played by the newstern in a
	may Galli basisanans

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	unit (TU) is just an a integrated cream as my
	$C \wedge A = A = A \wedge A$
	It can execute operations like boolean operation like subtraction, addition
2 203	and shifting Binary numbers cunt also perform by wise
	mathematical operation. Au and LU are a types of Arithmetic
	logic unit.
	Step 2: Secode instructions
	Commands.
	Commande Control unit
	43' Share non David Marca
ed >01	Main Memory parally topic
	Step 1: - Feten instructions of step 4: shows results in
× ,	From main memory.
	Machine Cycle. In a superior
	The state of the s
_	Register Organisation: - ab a wall de seas appended many de
	If the arrangement of register in the processor. The processor
	designed designers decide the organisation as the registors in a
<u> </u>	program. Different processor muy have different register organisation.
	Depending on the voles played by the register they can be
	categorized into 2 types.
⊗ ū	
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User Visible Register: These are visible to the assembly or machine
language programme and they use them efficiently to minimize
the memory refrences in the instructions of well, there register can
vale vale vale vale vale vale vale vale
be réferred using the muchine or assembly language.
Control and Status Register: The control and status register hold
the adress or data that is important to control the processor's operation.
The most important thing is those are not visible to user.
Types -> Program Counter.
-> Instruction Counter
-> Memory adress Coonter.
-> Manax Proffee Counter
-> Memory Buffer Counter.
Write a short note on.
Integer Representation:
Integers are whole numbers on fixed point numbers with the
radix point fixed after the least significant bit. They are
constrost to real numbers on floating point number where the
position of the radia point varies.
unsigned Intropres - can represent zero
o unsigned Integers - can represent zero and the integer.
signed Thregers - can represent zero, the and -ve integers
3 schemes have been proposed for signed integers.
V
a) Sing Sign - Magnitude representation.
b) is complement representation.
c) dis complement representation.
The secondarion.
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(:	Floating Point Number representation.
1	and the second of the second o
	A floating-point no can represent a very large value or a very
	small -ve number as well as a long of the large vature -ve and
	small -ve number as well as zero. A floating number is typically
	expressed in the scientific notation with a fraction (F) and
	an exponent (E) of a certain radix (r) in the & form Fxx2
	Decimal po use radia of 100 Fx 105) while his
	Decimal no use radia of 10(Fx 109) while binary number use radia of 2(Fx 2E) floating number arithmetic is very
	much less efficient than integer arithmetic. It could be speed up
	with a so called dedicated floating point compressor.
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	Morris De la Constantina
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	and the second s
	and the same state of the same
8	the test of plant or something the or treatment
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