PPA Assignment-3

Name - omkar sawant
339_PP_omkar

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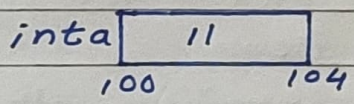
# Assignment No. -3

1. what is the difference between constant variable & non-const variable?

- In c programming their is concept called "data qualifiers" in this we can qualify the type of data.

Data qualifiers of type - 1. constant
2. volatile

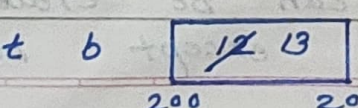
- constant qualifier -
- If we declare a variable with const keyword infront of it means it is a constant variable then we cannot change the value of that variable.
- for e.g const int a = 11 ;




if we want a++ . then it will not incremented.

- non-constant qualifier.
- Every variable is by default non-const. i.e (volatile). we can change value hold by that variable.

- for e.g int b = 12 ;
if we perform b++ It will increment to 13.



2. what is mean by block?

- A block is a set of instructions / statements written within the curly braces {}.
- Block contain more block in it, i.e nested blocks.
- variable declare within the block has block scope, ie it is accessible to within the block & it's inner block.

e.g

```
int main()
{  int a = 1;
   int b = 9;
   int c = 0;
// Block
   c = a+b;
   printf("a+b : %d \n", c);
   return 0;
}
```

3. what is mean by Array?

- Array is a collection of similar / homogeneous elements stored in indexed format.
- Array is linear Datatype.
- Array is a derived datatype

- e.g int Arr[2] = {10, 20};

- Array can be created of any primitive data type except boolean.

4. what are different standardization c programming language?

- C language was standardized by following:

- K & R standard C (Kerninghan & Ritchie) in 1978.

- ANSI (American National standardization Institute) in 1983 C89.

- ISO (International organization of standardization) in 1990 c90.

- c99 standardization done in 1999 is was started in 1995.

5. what are the differences between local & global variables?

- **Local variable**

- The variables which are defined within the some functions which are only accessible to that function block only are called local variables.

- eg: - variable declared within main() function are local variables.

• Global variables -
variables which are defined outside the functions are called global variables.
- Use of global variable are bad programming practice.
- Global variables are accessible to entire program.

6. what the task of operating system.

• operating does following tasks:

1. File management
- creating, deleting, updating file etc.

2. Memory Management
- To allocate memory to any variable or deallocate.

3. Process Management
- managing process is major task of operating system.

4. CPU Scheduling
- To schedule the process according to their priority.

5. Hardware Abstraction
- It is about hiding internal working of hardware from user.

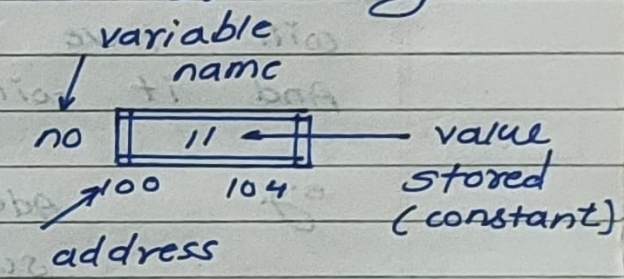
7. what is meant by Data structure?

- Storing the data in perticular manner in such way that they can be easily accessed or the program can can be run in efficient manner is called data structure.

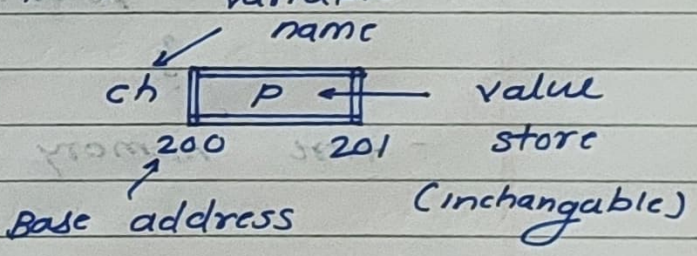
- Data Types - 1. linear Data structure.
2. non-linear Data structure.

8. Read below Statement & Draw diagramatic layout.

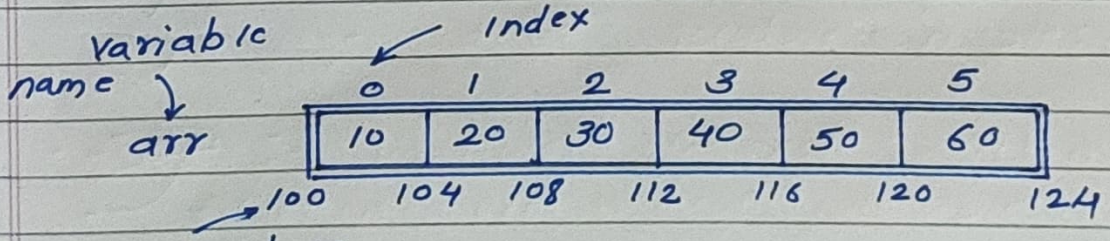
- const int no = 11;




- const char ch = 'P';




- const in arr [6] = {10, 20, 30, 40, 50, 60};



9. What is meant by function declaration & function defination?

- The function declaration is same as data / variable declaration.
- The declaration will give names to characteristics for function but does not allocate memory to it.

e.g Add (no1, no2);

- The function defination means the function will have the blocks and it will have statements in it. And it will have a return type in it.

e.g
```
Add (no1, no2){
    sum = 0;
    sum = no1 + no2;
    return sum;
}
```

- Here memory is allocated.

10. What is meant by "Preprocessor Directive Symbol"?

- Preprocessor directive symbol is #.
- Indicates preprocessor directive/file.
- It tells that this file/program will go to preprocessor before its execution.

- Preprocessor Does :