· # Different types of data to be stored in memory. Eg. integer, floot, character, double, etc. Eg - int -> Stores integers like -5,0,8 etc. char-> single character like 'a','+','b','7',etc.

flood > Floating point value like -2.014, 1.000, 6.78 ek

· Different date types use different amount of memory. Amount of memory used also depends on the architecture of your CPU!

| | Datatypes | Size (| in Bytes) |
|----------|-----------|----------------------|----------------------|
| | In int | 2 | 0814 |
| | float | I Nos 5 | Livis = Vist |
| | double | 9 Branch Sugar | 8 46 |
| | char | Las bino 7 Journalis | What is a fact |
| to other | | side character) | 12 primaries sug It. |
| C 1 | bock | des the sis a | will in confe |
| 2 (4 ca | void p | of sets of store | Odiana dida |

ch = dann 10 conta

Rodean: book is God = false;

Double : and order num? = 1.2; statements of a pospermining tanguage into Machine code (Bines

| Variable Naming / Nomenclatuse: |
|---------------------------------------------------------------------------------------|
| 1 Can contain alphabets, rumbers and underscox. 2 Cannot otast with a number. |
| 3 Cannot be keywoods like int, count, double, bood, et |
| a Case sensitive |
| B Cannot contain opecial symbols like it, \$,!, #, etc. |
| System wing. I different Dock Typic for your |
| size of (variable-name) |
| |
| o what if we stox a negative burn value in an unsigned member? |
| Example unsigned int a = = = 112; 1) Cout << assends; |
| 1 at 1 output 3 42949 67184 |
| Pypianation |
| we tried to steen -1120 |
| -112 = 24 complement of 112 |
| 112 - 60-11-00 to 10000 populs longo! |
| 16 compl. = 1110001111 |
| 2's comple = 1110010000 |
| Unsigned int uses all 32 bits to shore the value and |
| 1. in oiched int close not use the 24 confirment |
| cionin to chisplay the number. Thus 1 11-~ 10010000 gets printed as it is in decimal |
| Thus 1 11-~ 10010000 gets printed as it is in comme |

Basic Abithmetic Operators: 1) int / int = int CF-loor value of answer) Example = 5/2 = 1. 9/2 = 4 1 11 15 1103 and (4) (2) ind/float [float Infloat / int Just Minister could to 5.0/2 Ke endl double / int ? double outputs 2.5 int / double) 51.10 / (Magiste. 11 cme) Operators: " The poor" > / Cite man to be also as Relational Operators: 1 de adb? 1 Mio Horbiero a == b Non o buos As a greater than or equal to 6? Co >= b Yes 4 mailanality: -112 1 24 complement of Logical Operators CAND (DE) (NOT) 1100001: - 11 - 14.000 111 20000001 - 11 = 3dp. 5.22 I selfered but was all 32 with to other outers on the Mess (1) will make the value. As unskilled int close not true the 22 suplement styin to the flee the remiter. in Thus : 11 - 10010000 gots publed as dis in bring

```
While koop leman & Norma be Tale
                             Prince or note
    while (condition) -> while the condition is true,
    Colo and CARCANDOUNT, and
                               Example: Find sum from 1 toN
 Example: Point 1 to N
                            int main C
       int main 0
                              " } inton;
           int not
    Is of En
                                ( ) (cin >> n;
           cin >>n;
                                  int sum = 0;
            int i=1;
            while (i <= n) {
                               inti i= 1;
               cout << i < < " "
                                while (i <= n) {
               1 = 1+1; 1643 >> " soin & sum = sum + 1;
                                  Delinited 1970
            return 0;
                                   cout << "Sym from" << 1
                                   << to "<< n << " << oun;
 output: 6
1,23456
                                 o dentain
                                 output: 8
                                    sum from 1 to 8 = 36
Example: Sum of all even no. from I to N
     int main O
                              output o
        int h;
                              Sum from 1 to 8 is 20
        (in>> n/
                         THE THE COURT OF THE PERSON
         int sum=0;
        int i=2;
        while (i <= 12) {
            if (17.2==0)
                Sum = sum + i)
             i = i + 1;
       could sum form << 1 << "to"<< n << = "<< sum << end);
```

setum 0;

Example: Prime or not int main() int n; cin>>n; 1 int 1= 2; 11 05 1 while (i < n) E. if (m x 1= = 0 } cout << "Not Prime" << endly vietumo; 10 - 3 mp 2 mi (as is) stiples : Cold & () States () () 1 1 2 1 2 5 10 5 cout << " Prime" << endl; 11 retion 0; and 3,200 so 1005 output 14 Example: Surn of all eviner not top I to AI 1 . B. Harry & highway Sura John I've is Sum = Sum +