| CSE421- CON         | quiter Networks-  | - 8FQ              | Mary - and  | seus in pilotone a la l   |
|---------------------|-------------------|--------------------|-------------|--|
| 100 ture 13 -       | Static Routing    | 1 - 1200rbh/1      | In about    | stuar qu   |
| Pruting - th        | o decision maki   | ug process of      | the rol     | iter where the router dec  |
| which interte       | report to use t   | to forward the     | receive     | & packet.  |
| B                   |                   | 1036 228           | 0.8.14      | . Sfuda qi   |
|                     | ✓                 | Dynamic            | vord auch   | EN H IN IN K   |
|                     | Static<br>Routing | Bynamic<br>Routing | *E16.2      | Stupp of   |
|                     | (manual)          | (automatic)        |             |  |
| الله الق            | -> acquaint wfr   | emote network      | S CONTRACT  | 5 St. 6 St. 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1  |
| Grands standing     | R=3               | ee on hAA 2        | hoodola     | * no of static routes =  |
| 250mbA              | ISP               | (14)               | (A)         | no of remote network   |
| (Nothor trouter)    | Foll X Sol2 T     | Potoruet           | Bad onto    | Same skam  |
| LANA                | Solo .1 .1 Sol1   | min                | , 0 1       | Astep 1- Identify DC+  |
| 1.1.2.01.           | 245 2-21-5 30     | WAND AAA           | 0/30        | One of the state o |
| 8) au 91 hin 96/1   | 2010 901          | D.2 Folo           | 018 616     | Step2- Commands  |
|                     | FUANT             | 2                  |             |  |
| LANB PI             | C=3 d.a. 2. 0/30  | R2 LAN             | ^           | المرابع المرابع المنتواط   |
|                     | Can dool town     | P24                | Show to the | 1 0 tuo 7 9 1  |
| 15P → ne            | motely connected  | - LANB+WAN         | IF+ LAN     | C  |
|                     | •                 |                    |             | and acquaint them of   |
| (manual)            | 9 the remote      | netrooxks usin     | Ma shulo    | tommands.  |
|                     | * "unportant      |                    |             |  |
|                     |                   |                    |             | hozu ti zi ordo  |
|                     | 4                 |                    | 63          |  |
|                     |                   |                    | COULT CONI  | nection wf router ports  |
|                     | + Mop! Recursive  |                    |             |  |
| (c), <del>1</del> u | my specified      | -CF1 -0/10 (0)     | T) he       | 0.1.91.651 8   |
| For RI, direct      | connections ->    | LANB+WAN'          | ETWAN       | F 7/11 Sy - 9/2  |
|                     | AW +AWA!          |                    |             |  |
|                     | - LANC+ WA        | 34                 | (/          | 1  |
|                     |                   |                    |             | ND+ Internet   |
|                     |                   |                    |             | LLOA 11 tour   |
| Mu 82. u u          | -> 1ANA+1AN       | R+ MANIE + T       |             |  |

Date: ...... / ......

|  | Date:/                          |
|--|---------------------------------|
| (a) Directly connected   Attached = 12 - 24 months             | votuares -12 Hast               |
| ip route Notwork Address Quantition                            | 1-1-1-0-21-0                    |
| The around gother (Destry) 2000000 phistoric mail              | and out marine                  |
| * Static Route to LANA from RI.                                | and crotyotic state             |
| ip route 1:1:3:0 ass. ass. ass. 0                              | sofi                            |
| * u u u wand from RI.  |                                 |
| ip route 2.2.3.0 255.25.25.252                                 | 12<br>10 20 10                  |
| (b) Next hop   Recursive -                                     |                                 |
| en etamos formas (Destro)                                      | Address                         |
| Same examples from (a)   | (next router)                   |
| ip route 1.1.30 ass.ass.ass.o a.s                              | 0.00                            |
| ip moute 2.2.3.0 ass. 25.25.25.25 2.                           | 2.2.2 Valid IP under            |
| (c) July Specified-  |                                 |
| ip route Network Address Subject Mask (Desti) + 844 - bottomer | Fxil- Interpose Noxt Ho         |
| would trien Samo examples from (D) infrar plant with           | Later Pruting of the            |
| 1. 16 route 1.1.3.0 252355350 80 P                             | The Distriction of the American |
| 80 worte 3'9'30 922 922 925                                    |                                 |
| Where is it used? - MAN (Multi-Access-Wetw                     | with 1 Switched                 |
| trag noturale nottonna to Networks and Latronna                | AAsonia zan                     |
|  | gas from Cal                    |
| 8 172.16.1.0124 [110] via 172.16.2.2                           |                                 |
| Route type N.A S.M. AD Cost next nop                           | 10 mg                           |
| + cost is always to for static routing as it is conf           | figured manually, router        |
| performs no calculation of its nown is sand + san              | 1 E UN C9 W                     |
| * AD - Administrative Distance -> Trustroorthins               | eces stown 19rd                 |
| Trust 11 ADIL Primary Route + AD = 1A                          | commana                         |
| > Hoating &  | tane route                      |

| 2360   | Date:/   |
|--|--|
| Floating Static Routing-   | The state of the s |
| * backup route in case primo   | any route tails  |
| * uses AD; backup AD>1   |  |
| * less toustwoodby than prin   |  |
|  | " when not in use primary soute is being   |
| * there can be a backup of   |  |
|  | pudwar insides more  |
|  | Primary  |
| n-arlan agan U damo  | m 1 5210 01 102.   |
| 20/6/0 Privat  | 20/0/0   |
| a hun Da June  | 809.165.200.224/29   |
| sofofi   | 20/0/1   |
|  | 2011.4.0193  |
| The state of the s | TSP  |
| CIA MANAGER  | Backup 15100 [1/0]   |
| primary  | [1/0]  |
|  | 2011 200 200 200 200 200 200 200 200 200   |
|  | ace second addo  |
|  | 34 925.925.926.34D 8efet 1 2   |
| > backup   | (Sto 7 AD)   |
| Dalaut Ot L'a Duis   | [sfo] / b/   |
| Default Static Routing -   |  |
| after shower masking on-   | the packet, it will match wif the  |
| network entries in the o   |  |
| 4 15 no match is found, the  | le router will discard/drop the packets  |
| * to avoid this default &  | static routing is used   |
| a a command for the defo   | ault Path - PSID O DIEPI   |
| outile o.00.0  | 0.0.0.0 exit int next hop  |
| no net   | working ) usually configured at points   |
| 10 day out 5 matel   | thing & connected to the internet for  |
| · p = 0.010  | 0.040 ) the ISP router; packet sout to   |
|  | internet instead of dropping   |

| Summary Static Routing-                                   | - Santaga ida ( paide s)  |  |  |  |  |
|---|---|--|--|--|--|
| * a single route can be used to represent multiple routes |   |  |  |  |  |
| - same exit interface/next up IP                          |   |  |  |  |  |
| - set of contiguous adjacent netroorks                    |   |  |  |  |  |
| - reduce the number of soutes advertised                  |   |  |  |  |  |
| - creates smaller routing tables                          |   |  |  |  |  |
| - more efficient mouting to                               | able lookup process   |  |  |  |  |
| . 201.10.0122   | 201.1.0000000000  |  |  |  |  |
| De stolos MA  | 301.1. 000001000  |  |  |  |  |
| FIREE -008-591-605  | 801.1.000001100   |  |  |  |  |
| 201.1.4.0123  | 201.1.00000111.0  |  |  |  |  |
| (X)   | (X)   |  |  |  |  |
| 301:1.6.0(34<br>E1  | Summarized Route  |  |  |  |  |
| has information   | y 201·1·0·0   21  |  |  |  |  |
| of the 4 soute  |   |  |  |  |  |
| 201 120 24 UNG 22 C 22 C 22 E NEC                         | 006-221-Pag - 2tunes  |  |  |  |  |
| 13932 OVE 276 276 278 V66                                 | 1006 2d1.808 - 2turnei  |  |  |  |  |
| Problem of Summary Static Routing -                       | guilled -   |  |  |  |  |
| 1500  | Internet-3  |  |  |  |  |
|   | Thomas adopted the last   |  |  |  |  |
| 192,160,0122 / 192.                                       | 40.0122   |  |  |  |  |
|   | out in spiring direction  |  |  |  |  |
| X Disconfiguous (   | Warned distribute modifies  |  |  |  |  |
| RI  | 24 indo. Ild Lione at k   |  |  |  |  |
| 192.16.2.0124 192.16.1.0124                               |   |  |  |  |  |
| GARAGA TIP ROG CONTON                                     | army star of page   |  |  |  |  |
| Muttiple sides have the same sum                          | many address. Pouter launot   |  |  |  |  |
| aucial collich port to use to for                         | moord the packet. In this case,   |  |  |  |  |
| Summarized routing connect b                              | e used.   |  |  |  |  |
| pullygart to be proposed towards                          | MARKET CONTRACTOR OF THE SECOND CONTRACTOR OF |  |  |  |  |