TOtal: 24 bytes

Chapter 3 excercises 3.6: Nested subrotines and Static Scope a) whit does the program Print 4ugtus Main: Scope PB: Scape PA: Scope 4 giniticlized X initiclized Output(x) 943 Rostines 20stines : X + X/2 = 9/2=(4) 7 Procedure Bi Procedure A 2(2) B(3) Procedure Ri X+4/2-2 OUT PUT (G) X 4 3 x 3 = 9 R(3) 1 X + 2/2 = 1 R(1) -A(3)-Stack 6 C) Explain how A Sinds of: A(3) g is a local variable of R(3) main. A is a subroutin R(2) Static dynamic of B so it can reference R(1) linus Links it's static link to B. B(3) Then references B's Stetic Link to main. main 3,9(a) Each int occupies 4 bytes, How much dute is required for the vericous in this program? Ea, b, C & always needed allocate (12 bytes) € d, e ] Ef3 d, e, f and g, n, i will never be 3 I referenced of the same time so 29, h, i3 we will only held to allocate an additional (12 bytes)

3.14

When using Static Scoping: 1122 When using dynamic scoping: 1121

When using Static Scoping the Set x call from
the 'Second' Proceedure is able to see the globel x
and uses that, Whenex, the dynamic Scope will
instead see only the local X.