main

|  |  |  |
| --- | --- | --- |
| p | int | 100  When enter main, the main contour is generate. When execute A(50,D),a new contour-A1 is generate, please refer to Figure 2 |
| q | int | 100 |
| A | proc | A.cf |
| D | proc | D.cf |
| rpdl | system | |
| p:=100;  q:=100;  i.p.= A(50,D)  A(50,D); | | |

Figure 1

main

|  |  |  |
| --- | --- | --- |
| p | int | 100  Enter A1, p=100, q=50, so p!=q, then A(q+25,B) is executed, a new contour—A2 is generated.Pls refer to Figure 3 |
| q | int | 100 |
| A | proc | A.cf |
| D | proc | D.cf |
| rpdl | system | |
| A1   |  |  |  | | --- | --- | --- | | q | int | 50 | | C | func | D in main1 | | B | func | B.cf | | rpdl | End in main | | | i.p.= A(q+25,B)  A(q+25,B) | | | | | |

Figure 2

main

|  |  |  |
| --- | --- | --- |
| p | int | 100  Enter A2, p=100, q=75, so p!=q, then A(q+25,B) is executed, a new contour—A3 is generated. Pls refer to Figure 4 |
| q | int | 100 |
| A | proc | A.cf |
| D | proc | D.cf |
| rpdl | system | |
| A1   |  |  |  | | --- | --- | --- | | q | int | 50 | | C | func | D in main1 | | B | func | B.cf | | rpdl | End in main | | | A(q+25,B) | | |   A2   |  |  |  | | --- | --- | --- | | q | int | 75 | | C | func | B in A1 | | B | func | B.cf | | rpdl | End in A1 | | | i.p.= A(q+25,B)  A(q+25,B) | | | | | |

Figure 3

main

|  |  |  |
| --- | --- | --- |
| p | int | 100  Enter A2, p=100, q=100, so p==q, then C(q) is executed. In A3, C is “B in main2” |
| q | int | 100 |
| A | proc | A.cf |
| D | proc | D.cf |
| rpdl | system | |
| A1   |  |  |  | | --- | --- | --- | | q | int | 50 | | C | func | D in main1 | | B | func | B.cf | | rpdl | End in main | | | A(q+25,B) | | |   A2   |  |  |  | | --- | --- | --- | | q | int | 75 | | C | func | B in A1 | | B | func | B.cf | | rpdl | End in A1 | | | A(q+25,B) | | |   A3   |  |  |  | | --- | --- | --- | | q | int | 100 | | C | func | B in A2 | | B | func | B.cf | | rpdl | End in A2 | | | i.p.= C(q)  C(q) | | | | | |

Figure 4

main

|  |  |  |
| --- | --- | --- |
| p | int | 100  Enter A2, p=100, q=100, so p==q, then C(q) is executed. In A3, C is “B in main2” |
| q | int | 100 |
| A | proc | A.cf |
| D | proc | D.cf |
| rpdl | system | |
| A1   |  |  |  | | --- | --- | --- | | q | int | 50 | | C | func | D in main1 | | B | func | B.cf | | rpdl | End in main | | | A(q+25,B) | | |   A2   |  |  |  | | --- | --- | --- | | q | int | 75 | | C | func | B in A1 | | B | func | B.cf | | rpdl | End in A1 | | | A(q+25,B)  B2   |  |  |  | | --- | --- | --- | | p | int | 125 | |  |  |  | |  |  |  | |  |  |  | |  |  |  | | | |   A3   |  |  |  | | --- | --- | --- | | q | int | 100 | | C | func | B in A2 | | B | func | B.cf | | rpdl | End in A2 | | | i.p.= C(q)  C(q) | | | | | |