Task 1

Write the value of the variables in the boxes provided

Suppose,

X - Address is = Your Roll number e.g. BSCS2096

Y - Address is = Your Roll number (digit) + Your Roll number (digit) e.g. 2096 + 2096

= BSCS2192

Every number consider as 4B(byte).

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | P | \*p | Q | \*q | X | &x | y | &y |
| void main(){ |  |  |  |  |  |  |  |  |
| int \*p = NULL; | 0 | - | - | - |  |  |  |  |
| int x = 10,y=20; | 0 | - | - | - | X=10 | BSCS2096 | Y=20 | BSCS2192 |
| int \*q = NULL; | 0 | - | Q=0 | null |  | BSCS2096 | 20 | BSCS2192 |
| p = &x; | P= BSCS2096 | \*p=10 | 0 | null |  | BSCS2096 | 20 | BSCS2192 |
| (\*p)++; | BSCS2096 | 11 | 0 | null | X=11 | BSCS2096 | 20 | BSCS2192 |
| q = &y; | BSCS2096 | 11 | Q= BSCS2192 | 20 | 11 | BSCS2096 | 20 | BSCS2192 |
| x = 5 + y; | BSCS2096 | 25 | BSCS2192 | 20 | X=25 | BSCS2096 | 20 | BSCS2192 |
| \*p = \*p+2; | BSCS2096 | 27 | BSCS2192 | 20 | X=27 | BSCS2096 | 20 | BSCS2192 |
|  | BSCS2096 | 27 | BSCS2192 | 540 | 27 | BSCS2096 | 540 | BSCS2192 |
| y = y + \*q; | BSCS2096 | 27 | BSCS2192 | 540 | 27 | BSCS2096 | Y=1080 | BSCS2192 |
| p = q; | BSCS2192 | 1080 | BSCS2192 | 1080 | 27 | BSCS2096 | 1080 | BSCS2192 |
| y++; | BSCS2192 | 1080 | BSCS2192 | 1081 | 27 | BSCS2096 | 1081 | BSCS2192 |
| p++; | BSCS2196 | 1080 | BSCS2192 | 1081 | 27 | BSCS2096 | 1081 | BSCS2192 |
| \*p; | BSCS2196 | 1080 | BSCS2192 | 1081 | 27 | BSCS2096 | 1081 | BSCS2192 |
| q = q+3; | BSCS2196 | 1080 | BSCS2195 | 1081 | 27 | BSCS2096 | 1081 | BSCS2192 |
| \*q;  } | BSCS2196 | 1080 | BSCS2195 | 1081 | 27 | BSCS2096 | 1081 | BSCS2192 |

Task 2

Write the value of the variables in the boxes provided

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Numbers | Numbers[i] | p | \*p |
| main(){ |  |  |  |  |
| int numbers[5]; | BSSE0104 | Error | - | - |
| int\* p; | - | Error | - | - |
| p = numbers; | BSSE0104 | Error | BSSE0104 | 0 |
| \*p = 10; | BSSE0104 | Error | BSSE0104 | 10 |
| p++; | BSSE0104 | Error | BSSE0108 | 10 |
| \*p = 20; | BSSE0104 | Error | BSSE0108 | 20 |
| p =&numbers[2]; | BSSE0104 | Error | BSSE0108 | 20 |
| \*p = 30; | BSSE0104 | Error | BSSE0108 | 30 |
| p = numbers +3; | BSSE0104 | Error | BSSE0107 | 30 |
| \*p = 40; | BSSE0104 | Error | BSSE0107 | 40 |
| p = numbers; | BSSE0104 | Error | BSSE0104 | 40 |
| \*(p+4) = 50;  } | BSSE0104 | Error | BSSE0104 | 0 |

Task 3

#include<stdio.h>

int main()

{

int a[] = {5, 15, 34, 54, 14, 2, 52, 72};

int \*p=&a[1], \*q=&a[5]; //p=address of 15 q=address of 2

cout<<\*(p+3)<<endl; //print 14

cout<<\*(q-3)<<endl; //print 34

cout<<(int)(q-p)<<endl; //print 4

if(p<q){

cout<<"address” <<p<< value "<<\*p<<endl;

print address of 15 which is value of p and value of \*p is 15

}

if(\*q<\*p){

cout<<\*q<<endl; //print 2

}

return 0;

}

Output

14

34

4

Address 0x7fff716f3ce4 value 15

2