5.28

#include <stdio.h>

#include <stdlib.h>

int main(void)

{

char x;

printf("輸入一英文字母:");

scanf("%c", &x);

if (x >= 97)

x = x - 32;

else

x = x + 32;

printf("%c\n", x);

system("pause");

return 0;

}

5.29

#include <stdio.h>

#include <stdlib.h>

int num1, num2;

int lcm(int num1, int num2);

int main(void)

{

int same;

printf("輸入任意2數:");

scanf("%d%d",&num1,&num2);

same = lcm(num1, num2);

printf("2數的最小公倍數為%d\n", same);

system("pause");

return 0;

}

int lcm(int num1, int num2)

{

int x = 0;

int a=1;

int b = 1;

int c=5;

while (c!=0)

{

x=x++;

a = x%num1;

b = x%num2;

c = a + b;

}

return x;

}

5.34

#include <stdio.h>

#include <stdlib.h>

int base, exponent;

int integerpower(base, exponent);

int main(void)

{

printf("請輸入X的N次方(x n):");

scanf("%d%d", &base, &exponent);

printf("X的N次方為%d\n", integerpower(base, exponent));

system("pause");

return 0;

}

int integerpower(base, exponent)

{

if (exponent >= 1)

{

int ans = base\*integerpower(base, exponent - 1);

return ans;

}

else

return 1;

}

5.35

5.36

#include <stdio.h>

#include <stdlib.h>

void hanoi(int, int, int, int);

int main(void)

{

int i;

printf("總共有多少圓盤要搬?\n");

scanf("%d", &i);

hanoi(i, 1, 2, 3);

system("pause");

return 0;

}

void hanoi(int i, int begin, int mid, int dest)

{

if (i == 1)

printf("將第 %d 個盤子從第 %d 個塔移到第 %d 個塔\n",i, begin, dest);

else

{

hanoi(i - 1, begin, dest, mid);

printf("將第 %d 個盤子從第 %d 個塔移到第 %d 個塔\n",i, begin, dest);

hanoi(i - 1, mid, begin, dest);

}

}

git