P12

#include<stdio.h>

#include<stdlib.h>

int squ(int y);

int main(void)

{

int x;

for ( x = 1; x <= 10; x++)

{

printf("%d ", squ(x));

}

printf("\n");

system("pause");

return 0;

}

int squ(int y)

{

return y\*y;

}

P13

#include<stdio.h>

#include<stdlib.h>

double power(double, int);

int main(void)

{

int k;

double ans;

printf("計算3.5的k次方?請輸入k=");

scanf("%d",&k);

ans = power(3.5,k);

printf("3.5的%d次方=%f\n", k, ans);

system("pause");

}

double power(double x, int n)

{

int i;

double powerx = 1;

for (i = 1; i <= n; i++)

powerx = powerx\*x;

return powerx;

}

P15

#include<stdio.h>

#include<stdlib.h>

int maxi(int x, int y, int z);

int main(void)

{

int num1,num2,num3;

printf("enter three integers:");

scanf("%d %d %d", &num1, &num2, &num3);

printf("maximum is: %d\n", maxi(num1, num2, num3));

system("pause");

return 0;

}

int maxi(int x, int y, int z)

{

int max = x;

if (y > max)

max = y;

if (z>max)

max = z;

return max;

}

P16

#include<stdio.h>

#include<stdlib.h>

#include<math.h>

int main(void)

{

int x;

for (x = 1; x <= 10; x++)

printf("%.2f ", sqrt(x));

printf("\n");

system("pause");

return 0;

}

P18

#include<stdio.h>

#include<stdlib.h>

#include<string.h>

int main(void)

{

char string1[60] = "welcome";

char string2[60];

int len;

strcpy(string2, string1);

printf("string2=%s\n", string2);

len = strlen(string2);

printf("字串長度為%d\n", len);

system("pause");

return 0;

}

P20

#include<stdio.h>

#include<stdlib.h>

int main(void)

{

int i;

for ( i = 1; i <= 20; i++)

{

printf("%10d", 1 + (rand() % 6));

if (i % 5 == 0)

printf("\n");

}

system("pause");

return 0;

}

P21

#include<stdio.h>

#include<stdlib.h>

int main(void)

{

int i;

unsigned seed;

printf("enter seed:");

scanf("%u", &seed);

srand(seed);

for ( i = 1; i <= 10; i++)

{

printf("%10d", 1 + (rand() % 6));

if (i % 5 == 0)

printf("\n");

}

system("pause");

return 0;

}

P23

#include<stdio.h>

#include<stdlib.h>

#include<time.h>

enum stat

{

Continue,won,lost

};

int rolldice(void);

int main(void)

{

int sum;

int mypoint;

enum stat gamestatus;

srand(time(NULL));

sum = rolldice();

switch (sum)

{

case 7:

case 11:

gamestatus = won;

break;

case 2:

case 3:

case 12:

gamestatus = lost;

break;

default:

gamestatus = Continue;

mypoint = sum;

printf("point is %d\n", mypoint);

break;

}

while (gamestatus==Continue)

{

sum = rolldice();

if (sum == mypoint)

gamestatus = won;

else

if (sum == 7)

gamestatus = lost;

}

if (gamestatus == won)

printf("player wins\n");

else

printf("player loses\n");

system("pause");

return 0;

}

int rolldice(void)

{

int die1, die2, worksum;

die1 = 1 + (rand() % 6);

die2 = 1 + (rand() % 6);

worksum = die1 + die2;

printf("player rolled %d + %d = %d\n", die1, die2, worksum);

return worksum;

}

P27

#include<stdio.h>

#include<stdlib.h>

long fact(long num);

int main(void)

{

int i;

for (i = 0; i <= 10; i++)

printf("%2d! = %1d\n", i, fact(i));

system("pause");

return 0;

}

long fact(long num)

{

if (num <= 1)

return 1;

else

return(num\*fact(num - 1));

}

git