과제 5

1)

```
#include <stdio.h>
#include <stdlib.h>
#include <time.h>

double r_rand();

int main(void)
{
	int i;
	srand(time(NULL));
	for(i=0;i<5;i++)
		printf("%f, ", r_rand());
	printf("%f\n", r_rand());
	return 0;
}

double r_rand()
{
	return (double) rand() / RAND_MAX + 1;
}
```

2)

```
#include <stdio.h>
#include <stdlib.h>
#include <time.h>

void throw_dice(void);

int main(void)
{
	int i;
	srand(time(NULL));
	for (i = 0; i<100; i++)
		throw_dice();
	return 0;
}

void throw_dice(void)
{
	static int one, two, three, four, five, six;
```

```
	static int call_count = 0;
	int face;

	call_count++;
	face = rand() % 6 + 1;
	if (face == 1) one++;
	else if (face == 2) two++;
	else if (face == 3) three++;
	else if (face == 4) four++;
	else if (face == 5) five++;
	else six++;

	if (call_count == 100)
		printf("1: %d\n2: %d\n3: %d\n4: %d\n5: %d\n6: %d\n", one, two, three, four,
five, six);
}
```

3)

```
#include <stdio.h>

int my_mult(int n);

int main()
{
	int n, result;

	printf("정수를 입력하시오: ");
	scanf("%d", &n);

	result = my_mult(n);

	printf("1 부터 %d 까지의 곱: %d\n", n, result);
	return 0;
}

int my_mult(int num)
{
	if (num == 1)
		return num;
	else
		return num * my_mult(num - 1);
}
```

4)

```
#include <stdio.h>

int power(int base, int powerRaised);

int main(void)
{
	int base, powerRaised, result;

	printf("밑수: ");
	scanf("%d", &base);

	printf("지수: ");
	scanf("%d", &powerRaised);

	result = power(base, powerRaised);

	printf("%d^%d = %d\n", base, powerRaised, result);
	return 0;
}

int power(int base, int powerRaised)
{
	if (powerRaised == 0)
		return 1;
	else
		return (base*power(base, powerRaised - 1));
}
```