

Лаб 6 ангид бодох

1)

```
main.c
1 #include <stdio.h>
2
3 int main()
4 {
5     int sar;
6     printf("Sariin тоог оруул (1-12): ");
7     scanf("%d", &sar);
8
9     switch(sar)
10    {
11        case 1:
12            printf("31 удурtei");
13            break;
14        case 2:
15            printf("28/29 удурtei");
16            break;
17        case 3:
18            printf("31 удурtei");
19            break;
20        case 4:
21            printf("30 удурtei");
22            break;
23        case 5:
24            printf("31 удурtei");
25            break;
26        case 6:
27            printf("30 удурtei");
28            break;
29        case 7:
30            printf("31 удурtei");
31            break;
32        case 8:
33            printf("31 удурtei");
34            break;
35        case 9:
36            printf("30 удурtei");
37            break;
38        case 10:
39            printf("31 удурtei");
40            break;
41        case 11:
42            printf("30 удурtei");
43            break;
44        case 12:
45            printf("31 удурtei");
46            break;
47        default:
48            printf("1-12 хоорондох тоо оруулна уу");
49
50    }
51
52    return 0;
53 }
```

Sariin тоог оруул (1-12): 7
31 удурtei
...Program finished with exit code 0

2)

```
main.c
1 #include <stdio.h>
2
3 int main()
4 {
5     int n;
6     scanf("%d",&n);
7     switch(n%2){
8         case 1:
9             printf("sondgoi\n");
10            break;
11        case 0:
12            printf("tegsh\n");
13            break;
14    }
15
16    return 0;
17 }
```

12
tegsh
...Program finished with exit code 0
Press ENTER to exit console.

3)

```
main.c
1 #include<stdio.h>
2 #include<conio.h>
3
4 int main()
5 {
6     int i, j, p;
7     for(i=1;i<=10;i++)
8     {
9         for(j=1;j<=10;j++)
10        {
11            p = i*j;
12            printf("%d x %d = %d\t", i, j, p);
13        }
14        printf("\n");
15    }
16    return(0);
17 }
```

input

1 x 1 = 1	1 x 2 = 2	1 x 3 = 3	1 x 4 = 4	1 x 5 = 5	1 x 6 = 6	1 x 7 = 7	1 x 8 = 8	1 x 9 = 9	1 x 10 = 10
2 x 1 = 2	2 x 2 = 4	2 x 3 = 6	2 x 4 = 8	2 x 5 = 10	2 x 6 = 12	2 x 7 = 14	2 x 8 = 16	2 x 9 = 18	2 x 10 = 20
3 x 1 = 3	3 x 2 = 6	3 x 3 = 9	3 x 4 = 12	3 x 5 = 15	3 x 6 = 18	3 x 7 = 21	3 x 8 = 24	3 x 9 = 27	3 x 10 = 30
4 x 1 = 4	4 x 2 = 8	4 x 3 = 12	4 x 4 = 16	4 x 5 = 20	4 x 6 = 24	4 x 7 = 28	4 x 8 = 32	4 x 9 = 36	4 x 10 = 40
5 x 1 = 5	5 x 2 = 10	5 x 3 = 15	5 x 4 = 20	5 x 5 = 25	5 x 6 = 30	5 x 7 = 35	5 x 8 = 40	5 x 9 = 45	5 x 10 = 50
6 x 1 = 6	6 x 2 = 12	6 x 3 = 18	6 x 4 = 24	6 x 5 = 30	6 x 6 = 36	6 x 7 = 42	6 x 8 = 48	6 x 9 = 54	6 x 10 = 60
7 x 1 = 7	7 x 2 = 14	7 x 3 = 21	7 x 4 = 28	7 x 5 = 35	7 x 6 = 42	7 x 7 = 49	7 x 8 = 56	7 x 9 = 63	7 x 10 = 70
8 x 1 = 8	8 x 2 = 16	8 x 3 = 24	8 x 4 = 32	8 x 5 = 40	8 x 6 = 48	8 x 7 = 56	8 x 8 = 64	8 x 9 = 72	8 x 10 = 80
9 x 1 = 9	9 x 2 = 18	9 x 3 = 27	9 x 4 = 36	9 x 5 = 45	9 x 6 = 54	9 x 7 = 63	9 x 8 = 72	9 x 9 = 81	9 x 10 = 90
10 x 1 = 10	10 x 2 = 20	10 x 3 = 30	10 x 4 = 40	10 x 5 = 50	10 x 6 = 60	10 x 7 = 70	10 x 8 = 80	10 x 9 = 90	10 x 10 = 100

4)

```
main.c
1 #include<stdio.h>
2
3 int main()
4 {
5     int i,j,n;
6     scanf("%d",&n);
7     for (i = 1; i <= n; i++) {
8         for (j = 1; j <= i; j++) {
9             printf("x");
10        }
11        printf("\n");
12    }
13    return(0);
14 }
```

```
4
x
xx
xxx
xxxx
```

5)

```
main.c
1 #include <stdio.h>
2
3 int main()
4 {
5     int n, i, j, k;
6     printf("n tooog oruul: ");
7     scanf("%d", &n);
8
9     k = 1;
10
11    for(i=1; i<=n; i++)
12    {
13        for(j=1; j<=n; j++)
14        {
15            if(k == 1)
16            {
17                printf("x");
18            }
19            else
20            {
21                printf("o");
22            }
23            k *= -1;
24        }
25
26        if(n % 2 == 0)
27        {
28            k *= -1;
29        }
30
31        printf("\n");
32    }
33
34    return 0;
35 }
```

```
xoxoxo
oxoxox
xoxoxo
oxoxox
xoxoxo
oxoxox
```

6)

```
main.c
1 #include<stdio.h>
2
3 int main()
4 {
5     int i,j,n,l;
6     scanf("%d",&n);
7     for (i = 1; i <= n; i++) {
8         for (j = 1; j <= i; j++) {
9             printf("x");
10        }
11        printf("\n");
12    }
13    for (i = n; i >= 1; i--) {
14        for (l = i-1; l > 0; l--) {
15            printf("x");
16        }
17        printf("\n");
18    }
19    return(0);
20 }
```

```
5
x
xx
xxx
xxxx
xxxxx
xxxxx
xxx
xx
x
```

Нэмэлт

1)

```
main.c
1 #include <stdio.h>
2 int main() {
3     int n, i, f = 0;
4     printf("Eyreg too oruul: ");
5     scanf("%d", &n);
6
7     for (i = 2; i <= n / 2; ++i) {
8         if (n % i == 0) {
9             f = 1;
10            break;
11        }
12    }
13
14    if (n == 1) {
15        printf("1 ees uur too oruulna uu.");
16    }
17    else {
18        if (f == 0)
19            printf("%d ene too anhi too.", n);
20        else
21            printf("%d ene too anhnii too bish.", n);
22    }
23
24    return 0;
25 }
```

Eyreg too oruul: 19
19 ene too anhi too.

...Program finished with exit code 0
Press ENTER to exit console.

2)

```
main.c
1 #include<stdio.h>
2 #include<math.h>
3
4 int main()
5 {
6     int n,x,y,z;
7     scanf("%d",&n);
8     for(y=0;y<n;y++)
9     {
10         for(x=0;x<n;x++){
11             z=pow(x,2)-pow(y,2);
12             if(z%n==0){
13                 printf("%d %d\n",x,y);
14             }
15         }
16     }
17     return 0;
18 }
```

13
0 0
1 1
12 1
2 2
11 2
3 3
10 3
4 4
9 4
5 5
8 5
6 6
7 6
6 7
7 7
5 8
8 8
4 9
9 9
3 10
10 10
2 11
11 11
1 12
12 12

1)

```

main.c
1  #include <stdio.h>
2
3  int main()
4  {
5      int i, j, end, p;
6      printf("Eyreg too oruulna uu : ");
7      scanf("%d", &end);
8      printf("1 ees %d hurtelh anhnii toonuud ni:\n", end);
9      for(i=2; i<=end; i++)
10     {
11         p = 1;
12         for(j=2; j<=i/2; j++)
13         {
14             if(i%j==0)
15             {
16                 p = 0;
17                 break;
18             }
19         }
20         if(p==1)
21         {
22             printf("%d, ", i);
23         }
24     }
25
26     return 0;
27 }

```

Eyreg too oruulna uu : 50
1 ees 50 hurtelh anhnii toonuud ni:
2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31, 37, 41, 43, 47,
...Program finished with exit code 0
Press ENTER to exit console.

2)

```

#include<stdio.h>
#include<math.h>
main(){

    int x,y,z;

    for(x=1;x<=100;x++){
        for(y=1;y<=100;y++){
            for(z=1;z<=100;z++){
                if((pow(x,2) +
                pow(y,2)) == pow(z,2)){
                    printf("%d %d
                    %d\n",x,y,z);
                }
            }
        }
    }
    return 0;
}

```

3)

```

main.c
1  #include <stdio.h>
2
3  int main()
4  {
5      int n,i,c,d;
6      scanf("%d",&n);
7      for(i=1; i<=n;i++){
8          for(c=1;c<=(n-i);c++)
9              printf(" ");
10         for(d=1;d<=((2*i)-1);d++)
11             printf("x");
12         printf("\n");
13     }
14     return 0;
15 }

```

```

7
      x
     xxx
    xxxxx
   xxxxxxx
  xxxxxxxxx
 xxxxxxxxxxx
xxxxxxxxxxxxx
xxxxxxxxxxxxx

```