

2.21

```

main.c x
1  #include <stdio.h>
2  #include <stdlib.h>
3
4  int main()
5  {
6      printf("*****      ***      *      *\n");
7      printf("**      *      *      *      ***      *\n");
8      printf("**      *      *      *      *****      *\n");
9      printf("**      *      *      *      *      *\n");
10     printf("**      *      *      *      *      *\n");
11     printf("**      *      *      *      *      *\n");
12     printf("**      *      *      *      *      *\n");
13     printf("**      *      *      *      *      *\n");
14     printf("*****      ***      *      *\n");
15 }
16

```

2.23

```

main.c x
1  #include <stdio.h>
2  #include <stdlib.h>
3
4  int main()
5  {
6      int num1, num2, num3;
7
8      printf("Insert the first integer\n");
9      scanf("%d", &num1);
10
11     printf("Insert the second integer\n");
12     scanf("%d", &num2);
13
14     printf("Insert the third integer\n");
15     scanf("%d", &num3);
16
17     if (num1 > num2 & num1 > num3)
18         printf("%d is the largest integer\n", num1);
19
20     if (num2 > num1 & num2 > num3)
21         printf("%d is the largest integer\n", num2);
22
23     if (num3 > num1 & num3 > num2)
24         printf("%d is the largest integer\n", num3);
25
26     if (num1 < num2 & num1 < num3)
27         printf("%d is the smallest integer\n", num1);
28
29     if (num2 < num1 & num2 < num3)
30         printf("%d is the smallest integer\n", num2);
31
32     if (num3 < num1 & num3 < num2)
33         printf("%d is the smallest integer\n", num3);
34 }
35

```

2.24

```

main.c x
1  #include <stdio.h>
2  #include <stdlib.h>
3
4  int main()
5  {
6      int num;
7
8      printf("Enter an integer:\n");
9      scanf("%d", &num);
10
11     if (num % 2 == 0)
12         printf("%d is an even number\n", num);
13     else printf("%d is an odd number\n", num);
14 }
15

```

2.25

```

main.c x
1  #include <stdio.h>
2  #include <stdlib.h>
3
4  int main()
5  {
6      printf("      AAAAAAAAAA\n");
7      printf("      A      A\n");
8      printf("      A      A\n");
9      printf("      A      A\n");
10     printf("      AAAAAAAAAA\n\n");
11     printf("      WWWWWWWWW\n");
12     printf("      W          \n");
13     printf("      WWWWWWWWW\n");
14     printf("      W          \n");
15     printf("      WWWWWWWWW\n");
16 }
17

```

2.26

```

main.c x
1  #include <stdio.h>
2  #include <stdlib.h>
3
4  int main()
5  {
6      int num1, num2;
7
8      printf("Insert an integer:\n");
9      scanf("%d", &num1);
10
11     printf("Insert another integer:\n");
12     scanf("%d", &num2);
13
14     if (num1 % num2 == 0)
15         printf("%d is the multiple of %d\n", num1, num2);
16     else printf("%d is not the multiple of %d\n", num1, num2);
17 }
18

```

2.27

```

main.c x
1  #include <stdio.h>
2  #include <stdlib.h>
3
4  int main()
5  {
6      printf("      *      \n");
7      printf("      ***     \n");
8      printf("      ***** \n");
9      printf("      *        \n");
10     printf("*****\n\n");
11
12     printf("      *      \n      ***      \n      *****      \n      *****      \n*****\n\n");
13 }
14

```

2.31

```
main.c X
1  #include <stdio.h>
2  #include <stdlib.h>
3
4  int main()
5  {
6      int i, a, b;
7      printf("number square cube\n");
8      for (i = 0; i <= 10; i++)
9      {
10         a = i * i;
11         b = i * i * i;
12         printf("%6d %7d %5d\n", i, a, b);
13     }
14 }
15
```

2.32

```
main.c X
1  #include <stdio.h>
2  #include <stdlib.h>
3
4  int main()
5  {
6      float weight, height, bmi;
7      printf("Input your weight(in kilograms)\n");
8      scanf("%f", &weight);
9
10     printf("Input your height(in meter)\n");
11     scanf("%f", &height);
12
13     bmi = weight/(height*height);
14
15     if (bmi < 18.5)
16     printf("You are underweight\n");
17
18     else if (18.5 <= bmi <= 24.9)
19     printf("You are normal\n");
20
21     else if (25 <= bmi <= 29.9)
22     printf("You are overweight\n");
23
24     else if (bmi > 30)
25     printf("You are obese\n");
26
27     else
28     printf("Error\n");
29 }
30
```

2.33

```
main.c X
1  #include <stdio.h>
2  #include <stdlib.h>
3
4  int main()
5  {
6      float mile, gas, mpg, park, toll, cost;
7
8      printf("Input your total miles driven per day\n");
9      scanf("%f", &mile);
10
11     printf("Input the cost per gallon of gasoline\n");
12     scanf("%f", &gas);
13
14     printf("Input your average miles per gallon\n");
15     scanf("%f", &mpg);
16
17     printf("Input your parking fees per day\n");
18     scanf("%f", &park);
19
20     printf("Input your tolls per day\n");
21     scanf("%f", &toll);
22
23     cost = (gas * mpg)/mile + park + toll;
24
25     printf("Your total cost is %f", cost);
26 }
27
```

Conclusion:

From doing this homework, I learnt about the workings of the “printf” and “scanf” library function. I also learnt to use operators in C. Other than that, I also learnt how to use “if” and “else” statement. Last but not least, to assign strings to data types (int, char, string, float, double, long, etc.) including their format specifier.

Code : <https://github.com/AldrichWijaya/Homework>