```
/*
Berkiel Molinard
CS36
21 November 2021
Program 7
*/
#define _CRT_SECURE_NO_WARNINGS
#include <stdio.h>
#include <stdbool.h>
#include <stdlib.h>

void inemp(char *name, char *dept, float *yinc)
{

 printf("\n\nEmployee's first name? ");
 scanf("%s", name);

 printf("In what department? ");
 scanf("%s", dept);

 printf("Current income? ");
 scanf("%f", *(&yinc));

}

void perc(float *yinc, float *raisep)
{

 if (*yinc <= 70000)
 {
```

```
 *raisep = 8.6;
}
else if (70000.01 < *yinc && *yinc <= 80000)
{
 *raisep = 7.4;
}
else if (80000.01 < *yinc && *yinc <= 90000)
{
 *raisep = .8;
}
else if (*yinc >= 90000.01)
{
 *raisep = 4.9;
}

}

void calc(float *rammt, float *yinc, float *raisep, float *totcinc, float *totrammt, float *totnpay, float
*npay)
{

 *rammt = *yinc * (*raisep / 100);
 *npay = *yinc + *rammt;

 *totcinc += *yinc;
 *totrammt += *rammt;
 *totnpay += *npay;

}
```

```
void main()
{

 char name[10];
 char dept[10];
 float yinc = 0;
 float raisep = 0;

 float rammt = 0;
 float npay = 0;

 float totcinc = 0;
 float totrammt = 0;
 float totnpay = 0;

 int numofemp = 0;

 printf("How many employees? ");
 scanf("%i", &numofemp);

 for (int i = 1; i <= numofemp; i++)
 {
// The loop is an deterministic entrance controlled loop since at the very beginning of the user input of the program
// the individual inputs the amount of people that are to be added. thus it is entrance controlled.
  inemp (name, dept, &yinc);
  perc(&yinc, &raisep);
  calc(&rammt, &yinc, &raisep, &totcinc, &totrammt, &totnpay, &npay);

  printf(" %s in %s has a current income of $%0.2f and a raise of %0.2f percent. Their raise is of $%0.2f and their new pay amount is $%0.2f.\n", name, dept, yinc, raisep, rammt, npay);
```

```
 }


 printf("\n\n The total current income of everyone is $%0.2f. The total raise for everyone is $%0.2f. The
total new pay for everyone is $%0.2f.\n\n", totcinc, totrammt, totnpay);

 return 0;


}
```

How many employees? 5

Employee's first name? Mike
In what department? Accounting
Current income? 66111.54
Mike in Accounting has a current income of $66111.54 and a raise of 8.60 percent. Their raise is of $5685.59 and their new pay amount is $71797.13.

Employee's first name? Shohei
In what department? Marketing
Current income? 89224.17
Shohei in Marketing has a current income of $89224.17 and a raise of 5.80 percent. Their raise is of $5175.00 and their new pay amount is $94399.17.

Employee's first name? Jared
In what department? Management

Current income? 75123.25
Jared in Management has a current income of $75123.25 and a raise of 7.40 percent. Their raise is of $5559.12 and their new pay amount is $80682.37.

Employee's first name? Anthony
In what department? Sales
Current income? 69644.44
Anthony in Sales has a current income of $69644.44 and a raise of 8.60 percent. Their raise is of $5989.42 and their new pay amount is $75633.86.

Employee's first name? Justin
In what department? Management
Current income? 96222.77
Justin in Management has a current income of $96222.77 and a raise of 4.90 percent. Their raise is of $4714.92 and their new pay amount is $100937.69.

The total current income of everyone is $396326.19. The total raise for everyone is $27124.05.
The total new pay for everyone is $423450.25.

Process returned 145 (0x91) execution time : 292.160 s
Press any key to continue.

```
/*
Berkiel Molinard
CS36
21 November 2021
Program 8
*/
#define _CRT_SECURE_NO_WARNINGS
#include <stdio.h>
#include <stdbool.h>
#include <stdlib.h>
#include <time.h>

void intro()
{

	printf("\nWelcome to the guessing game!\n");
	printf("Guess a number from 1 to 50. You have 6 tries to guess correctly, good luck!\n");
	printf("Pssst: here's a protip, If you get it wrong, I'll throw you a bone! :) \n\n");

}

void game()
{

	int randv;
	time_t t;
	srand((unsigned)time(&t));
	randv = rand() % 50 + 1;
```

```
int uguess;
int i = 0;
for (i = 1; i <= 6; i++)
{

	printf("\nGimmie a number: ");
	scanf("%i", &uguess);

	if (randv > uguess)
	{

		printf("\nTry a bit larger.\n");

	}
	else if (randv < uguess)
	{

		printf("\nMaybe a bit smaller.\n");

	}
	else
	{

		printf("\nWell done, after %i tries you guessed correctly!\n\n", i);
		break;

	}

}
```

```
        if (i == 7)
        {

                printf("\n\nMan, you're bad.....");
                printf("\nIt was %i, the number was %i\n\n", randv, randv);

        }

}

void main()
{

        int input;
        do
        {

                printf("Yet another number game\n");
                printf("\nPress 1 and then enter to play\n");
                printf("Press 0 and then enter to exit\n");
                printf("\nMake your choice: ");
                scanf("%i", &input);

                switch (input)
                {

                case 1:
                        intro();
                        game();
                        break;
```

```
            case 0:
                printf("\nSee ya, Wouldn't wanna be ya\n");
                break;

            default:
                printf("\nBruh\n\n");
                break;

            }



    } while (input);

    return 0;

}
```

Yet another number game

Press 1 and then enter to play

Press 0 and then enter to exit

Make your choice: 1

Welcome to the guessing game!

Guess a number from 1 to 50. You have 6 tries to guess correctly, good luck!

Pssst: here's a protip, If you get it wrong, I'll throw you a bone! :)

Gimmie a number: 30

Try a bit larger.

Gimmie a number: 40

Maybe a bit smaller.

Gimmie a number: 42

Maybe a bit smaller.

Gimmie a number: 41

Maybe a bit smaller.

Gimmie a number: 35

Maybe a bit smaller.

Gimmie a number: 32

Well done, after 6 tries you guessed correctly!

Yet another number game

Press 1 and then enter to play

Press 0 and then enter to exit

Make your choice: 3

Bruh

Yet another number game

Press 1 and then enter to play

Press 0 and then enter to exit

Make your choice: 0

See ya, Wouldn't wanna be ya

Process returned 0 (0x0)   execution time : 41.057 s

Press any key to continue.