Name: Mark Achiles G. Flores Jr. **Function without Arguments**
Year & Section: BSCS 1-4

1. Assume that you have functions print_h, print_i, print_m, and print_o, each of which draws a large block letter (for example, print_o draws a block letter O). What is the effect of executing the following main function?

```
int main(void)
{
        print_h();
        print_i();
        printf("\n\n\n");
        print_m();
        print_o();
        print_m();
return 0;
}
```

- First, the function *print_h()* will be executed, followed by the function *print_i()*. Then, there will be 3 blank lines indicated by *printf("\n\n\n")*. To finish the program, the functions *print_m()*, *print_o()*, and *print_m()* will be executed in that order. The exact output is impossible to depict with the given information but it might look like the image below.

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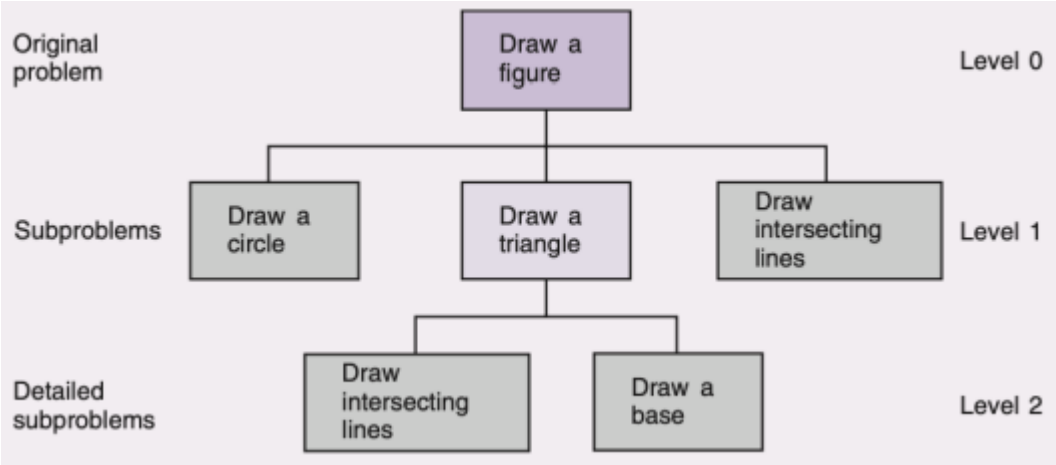
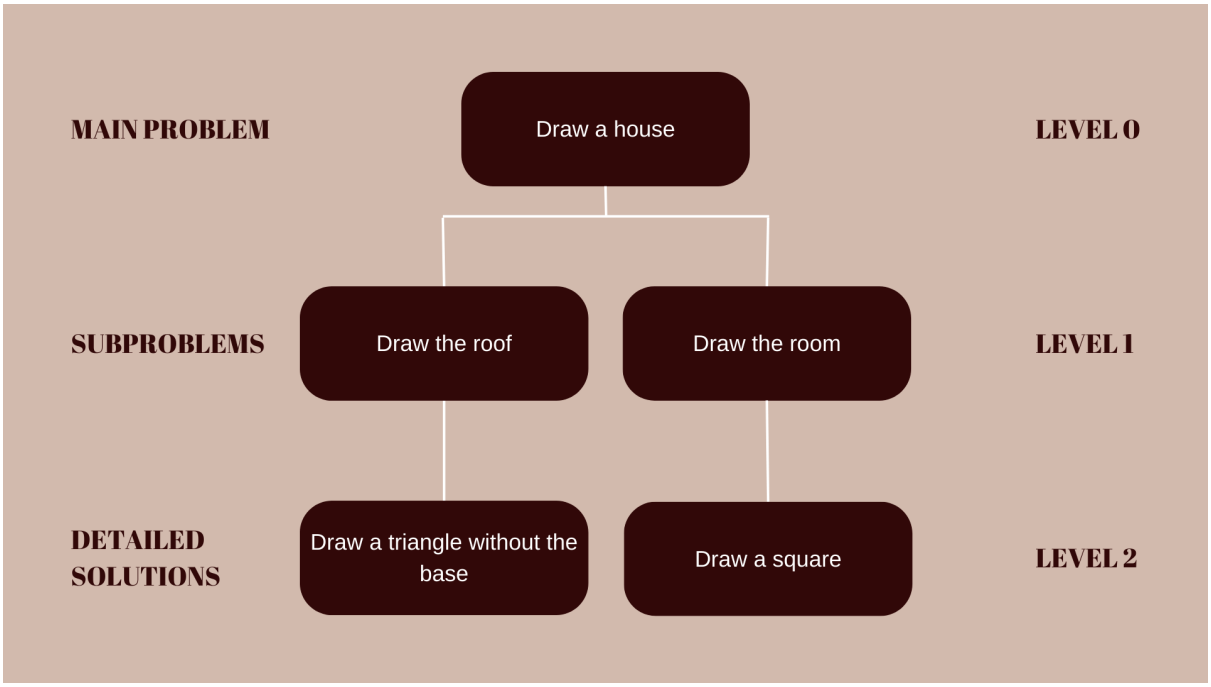
2. Draw the structure chart for the problem of drawing the house:

Sample Structure Chart for Drawing a Stick Figure:



Answer:



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3. Write a function drawParallel that draws parallel lines and a function drawRectangle that uses drawParallel and drawBase to draw a rectangle

```c
#include <stdio.h>

void drawParallel() {
    printf("#             #\n");
    printf("#             #\n");
    printf("#             #\n");
}

void drawBase() {
    printf("###############\n");
}

void drawRectangle() {
    drawBase();
    drawParallel();
    drawBase();
}

int main() {
    drawRectangle();

    return 0;
}
```

4. Write a program for the problem described in item number 2.

```c
#include <stdio.h>

void drawRoof() {
    printf("  ##  \n");
    printf(" #  # \n");
    printf("#    #\n");
}

void drawRoom() {
    printf("######\n");
    printf("#    #\n");
    printf("#    #\n");
    printf("######\n");
}

void drawHouse() {
    drawRoof();
    drawRoom();
}

int main() {
    drawHouse();
    return 0;
}
```

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5. Show the revised program that calls function ***instruct*** for the circle area and circumference

Instructions:
This program computes the area and circumference of a circle.

To use this program, enter the radius of the circle after the prompt: Enter radius=>

```c
#include <stdio.h>
#include <math.h>

void instruct() {
    printf("Instructions:\n");
    printf("This program computes the area and circumference of a circle.\n");
    printf("To use this program, enter the radius of the circle after the prompt:\nEnter radius=> ");
}

int main() {
    float radius, area, circum;
    const float PI = 3.14159;

    instruct();
    scanf("%f", &radius);

    area = PI * pow(radius, 2);
    circum = 2 * PI * radius;

    printf("Area: %.2f\n", area);
    printf("Circumference: %.2f\n", circum);

    return 0;
}
```