

## CPE100 Computer Programming for Engineers| Leb\_3\_KMUTT

1) Write C program to “Covert Celsius to Fahrenheit”

```
#include <stdio.h>

int main() {
    float tempC;
    float tempF;
    //Jedsadaporn Pannok ID:66070503410
    printf("Enter your Celsius: ");
    scanf("%f", &tempC);

    tempF = (tempC / 5) * 9 + 32;
    printf("Fahrenhit = %.2f", tempF);
    return 0;
}
```

2) Write C program to "Check whether a following number can create Triangle or not."

```
#include <stdio.h>
int main() {
    //Jedsadaporn Pannok ID:66070503410
    int a, b, c;
    printf("Enter your number\n");
    scanf("%d", &a);
    printf("Enter your number\n");
    scanf("%d", &b);
    printf("Enter your number\n");
    scanf("%d", &c);
    if(a+b>c && a+c>b && b+c>a){
        printf("YES");
    }else {
        printf("NO");
    }
    return 0;
}
```

3) Write C program to "Output Number of bag you need to carry item by first number is total weight and second number is max weight bag can hold"

```
#include <stdio.h>
#include <math.h> // Imported to be able to use ceil / ceil = Round off the decimal
int main() {
    float weight,max_weight;
    float sum;
    //Jedsadaporn Pannok ID:66070503410
    printf("Enter your weight ");
    scanf("%f", &weight);
    printf("Enter your max_weight ");
    scanf("%f", &max_weight);
    sum = weight/max_weight;
    printf("%f", ceil(sum));
}
```

Or not use math.h

```
#include <stdio.h>
int main() {
    float weight,max_weight,sum;
    int numresult, numpart;
    double decimalPart;
    printf("Enter your weight ");
    scanf("%f", &weight);
    printf("Enter your max_weight ");
    scanf("%f", &max_weight);
    sum = weight/max_weight;
    //Jedsadaporn Pannok ID:66070503410
    numpart = (int)sum;
    printf("Numpart = %d \n", numpart);
    decimalPart = sum - numpart;
    printf("DecimalPart = %d \n", decimalPart);

    if (decimalPart >= 0.5) {
        numresult = numpart + 1;
        printf("DecimalPart > 0.5 round up \n");
    } else {
        numresult = numpart;
        printf("DecimalPart > 0.5 round down \n");
    }
    printf("result : %d", numresult);
    return 0;
}
```

Write C program to “Output Quotient and Remainder from 2 Input number”

```
#include <stdio.h>
#include <math.h> // Imported to be able to use fmod / fmod = mod decimal
int main() {
    float a, b, sum, fraction;
    printf("Enter your number ");
    scanf("%f",&a);
    printf("Enter your number ");
    scanf("%f",&b);
    sum = a/b;
    fraction = fmod(a,b);
    //Jedsadaporn Pannok ID:66070503410
    int sumResult = (int)sum; //decimal to integer
    int fractionResult = (int)fraction; //decimal to integer
    printf("%d\t", sumResult);
    printf("%d", fractionResult);
    return 0;
}
```

5) Write C program to “Output sum of angles inside any polygon”

```
#include <stdio.h>

int main() {
    int angles_inside, n;
    //Jedsadaporn Pannok ID:66070503410
    printf("Enter your number of squares: ");
    scanf("%d",&n);

    angles_inside = (n - 2)*180;
    printf("Angles inside = %d",angles_inside);

    return 0;
}
```

6) Write C program to “ Output the height of building, Where you drop the rock to the ground by specifying a time it hit the ground”

```
#include <stdio.h>

int main() {
    int time, h, v;
    int a = 10;
    int u = 0;

    printf("Enter your time: ");
    scanf("%d", &time);

    v = u + (a * time);
    h = (u + v) / 2 * time;
    printf("height = %d m", h);
    //Jedsadaporn Pannok ID:66070503410
    return 0;
}
```

7) Write C program to “ Check whether this character are upper case or lower case or number”

```
#include <stdio.h>
int main() {
    char character;
    printf("Enter a character: ");
    scanf("%c", &character);

    if (character >= 'A' && character <= 'Z') {
        printf("Upper\n");
    } else if (character >= 'a' && character <= 'z') {
        printf("Lower\n");
    } else if (character >= '0' && character <= '9') {
        printf("Number\n");
    } else {
        printf("does not qualify!!!\n");
    }
    return 0;
    //Jedsadaporn Pannok ID:66070503410
}
```