(15/09/2020) WEEK-1

67

```
1) Void arithmetic(int a, int b);
   Void relational(int a, int b);

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

int main()
{
    int a, b, choice;
    choice = 0;
    do
    {
        printf("Enter a number 'a' \n");
        scanf("%d", &a);
        printf("Enter a number 'b' \n");
        scanf("%d", &b);
        printf("---MENU---\n");
        printf("1. Arithmetic Operations \n");
        printf("2. Relational Operations \n");
        printf("3. EXIT \n");
        printf("Enter a number of your choice \n");
        scanf("%d", &choice);
        switch(choice)
        {
            case 1: arithmetic(a, b);
                    break;
            case 2: relational(a, b);
                    break;
            case 3: printf("EXITING \n");
                    break
            default: printf("Enter correct number \n");
        }
    }while(choice != 3);
    return 0;
}
```

```
void arithmetic(int a, int b)
{
    int ch;
    printf("---- SUB MENU ----\n");
    printf("1. Addition \n");
    printf("2. Subtraction \n");
    printf("3. Multiplication \n");
    printf("4. Division \n");
    printf("5. Modulus \n");
    printf("Enter your choice \n");
    scanf("%d", &ch);
    switch(ch)
    {
        case 1: printf("The sum is: %d \n", (a+b));
                break;
        case 2: printf("The diff is: %d \n", (a-b));
                break;
        case 3: printf("The product is: %d \n", (a*b));
                break;
        case 4: printf("The quotient is: %d \n", (a/b));
                break;
        case 5: printf("The remainder is %d \n", (a%b));
                break;
        default: printf("Enter number correctly \n");
    }
}

void relational(int a, int b)
{
    int ch;
    printf("---- SUB MENU ----\n");
    printf("1. Less than \n");
    printf("2. Greater than \n");
```

```
printf("3. Equality \n");
printf("4. Less than or Equal to \n");
printf("5. Greater than or Equal to \n");
printf("Enter your choice \n");
scanf("%d", &ch);
switch(ch)
{
    case 1:
    if(a < b)
      printf("%d is less than %d \n", a, b);
    else
      printf("%d is not lesser than %d \n", a, b);
    break;
    case 2:
    if(a > b)
      printf("%d is greater than %d \n", a, b);
    else
      printf("%d is not greater than %d \n", a, b);
    break;
    case 3:
    if(a == b)
      printf("%d is equal to %d \n", a, b);
    else
      printf("%d is not equal to %d \n", a, b);
    break;
    case 4:
    if(a <= b)
      printf("%d is less than or equal to
              %d \n", a, b);
    else
      printf("%d is neither less than nor equal
              to %d \n", a, b);
    break;
```

```
case 5:
if (a >= b)
  printf("%d is greater than or equal to
          %d\n", a, b);
else
  printf("%d is neither greater than nor
          equal to %d\n", a, b);
  break;
  default: printf("Enter number correctly\n");
}
}
```

2)

```
float sumaver(int x, int y);
void printeven(int x, int y);

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

int main()
{
  int a, b, c, small;
  float avg = 0;
  printf("Enter first number\n");
  scanf("%d", &a);
  printf("Enter second number\n");
  scanf("%d", &b);
  printf("Enter third number\n");
  scanf("%d", &c);
  if((a > c) && (b > c))
  {
    avg = sumaver(a, b);
    printf("The average of greater 2 numbers is:
      %.2f\n", avg);
  printeven(a, b);
}
```

```
else if ((a > b) && (c > b))
{
    avg = sumaven(a, c);
    printf("The average of greater of 2 numbers
            is : %.2f \n", avg);
    printeven(a, c);
}
else if ((b > a) && (c > a))
{
    avg = sumaven(b, c);
    printf("The average of greater 2 numbers
            is %.2f \n", avg);
    printeven(a, c);
}
return 0;
}

float sumaven(int x, int y)
{
    printf("The sum of greater two numbers is :
                %d \n", (x+y));
    return (float)(x+y)/2.0;
}
void printeven(int x, int y)
{
    int p1, p2;
    if (x < y)
    {
        p1 = x; p2 = y;
    }
    else
    {
        p1 = y; p2 = x;
    }
```

```
printf("The even numbers between %d and
        %d are: \n", p1, p2);
for(int i= p1; i<=p2; i++)
{
    if (i%2==0)
        printf("%d\n", i);
}
}
```