```fortran
program question1
  implicit none
  real :: side1, side2, side3
  character(len=20) :: triangleType
  print *, 'Type the length of triangle side 1'
  read *, side1

  print *, 'Type the length of triangle side 2'
  read *, side2

  print *, 'Type the length of triangle side 3'
  read *, side3

  if ( (side1==side2).and.(side2==side3) ) then
    triangleType = "Equilateral"
  else if ( (side1/=side2).and.(side2/=side3).and.(side3/=side1) ) then
    triangleType="Scalene"
  else
    triangleType="Isosceles"
  end if

  print *, "This triangle is a ", triangleType, "'s type"
end program question1
```

```fortran
program question2
  implicit none
  real, dimension (3) :: numbers
  real :: aux
  integer :: i, j
  ! Read numbers
  do i = 1, 3
    print *, "Type a number for position ", i
    read *, numbers(i)
  end do

  aux = 0
  do i = 1, 2
    do j = 2, 3
      if ( numbers(i)>numbers(j) ) then
        aux = numbers(i)
        numbers(i) = numbers(j)
        numbers(j) = aux
      end if
    end do
  end do

  print *, "Numbers in ascending order:"
  do i = 1, 3
    print *, numbers(i)
  end do
end program question2
```

```fortran
program questao3
  implicit none
  integer :: i
  real :: media, calculateMedia, calculateMinimalScore, minimalScore, lastScore
  real, dimension(3) :: notas
  do i = 1, 3
    print *, "Insira a nota da prova", i
    read *, notas(i)
  end do
  media = calculateMedia(notas)
  if ( media>=7 ) then
    print *, "Parabéns, você foi aprovado com média", media
  else if( (media<7).and.(media>=5) ) then
    minimalScore = calculateMinimalScore(media)
    print *, "Você está na quarta prova :'("
    print *, "Para passar, você precisará obter a seguinte nota na recuperação", minimalScore
    print *, "Insira o valor da nota obtida na quarta prova"
    read *, lastScore
    media = (media+lastScore)/2
    if ( media>=5 ) then
      print *, "Parabéns, você conseguiu passar :)"
    else
      print *, "Infelizmente, você não conseguiu obter a nota necessária :("
    end if
    print *, "Sua média final foi de ", media
  else
    print *, "Você ficou retido :("
  end if

end program questao3

function calculateMedia(notas) result(media)
  implicit none
  real, dimension(3) :: notas
  real :: media, soma
  integer :: i
  soma = 0
  do i = 1, 3
    soma = soma + notas(i)
  end do
  media = soma/3
end function calculateMedia

function calculateMinimalScore(media) result(score)
  implicit none
  real :: media, score
  score = 10-media
end function calculateMinimalScore
```

```fortran
program question4
  implicit none
  integer :: number
  real :: summation, inverseSum

  do while((number ⩽ 1).or.(number ⩾ 100))
    print *, "Informe um numerto entre 1 e 100"
    read *, number
  end do

  print *, "Somatório", summation(number)
  print *, "Somatório dos inversos", inverseSum(number)
end program question4

function summation(number) result(operationResult)
  implicit none
  integer :: number, i
  real :: operationResult
  operationResult = 0

  do i = 1, number
    operationResult = operationResult + i
  end do
end function summation

function inverseSum(number) result(operationResult)
  implicit none
  integer :: number, i
  real :: operationResult
  operationResult = 0

  do i = 1, number
    operationResult = operationResult + 1./i
  end do
end function inverseSum
```

```fortran
program question5
  implicit none
  integer :: i, number, productValue

  print *, "Insira um valor inteiro positivo"
  read *, number

  productValue = 1
  do i = 1, number
    productValue = productValue*i
  end do

  print *, productValue
end program question5
```

```fortran
program question6
  implicit none
  integer :: i, numberOfSequences, n1, n2, result

  print *, "Insira a quantidade de vezes que o algoritmo irá repetir"
  read *, numberOfSequences

  n1 = 0
  n2 = 1
  print *, n1
  print *, n2
  do i = 3, numberOfSequences
    result = n1 + n2
    print *, result
    n1 = n2
    n2 = result
  end do

end program question6
```