Algorithm

- 1. Start
- 2. Declare the variable CGPA and Num_Students
- 3. Get the input for CGPA and Num_Students
- 4. Start loop
- 5. If CGPA is between 5.0-6.0 then Grade is E
- 6. Elif CGPA is between 6.1-7.0 then Grade is D
- 7. Elif CGPA is between 7.1-7.5 then Grade is C
- 8. Elif CGPA is between 7.6-8.0 then Grade is B
- 9. Elif CGPA is between 8.1-8.5 then Grade is B+
- 10. Elif CGPA is between 8.6-9.0 then Grade is A
- 11. Elif CGPA is between 9.1-9.5 hen Grade is A+
- 12. Else CGPA is between 9.6-10.0 then Grade is S
- 13. Stop loop
- 14. Stop

Pseudocode

```
startFn
void main()
         int Num_Students
         input (Num_Students)
         float CGPA
         int i
         for (i=0; i<Num_Students; i=i+1)
                   input (CGPA)
                   if (6>=CGPA && CGPA>=5)
                            print ("Grade is E")
                   else
                            if (7>=CGPA && CGPA>=6.1)
                                      print ("Grade is D")
                            else
                                      if (7.5>=CGPA && CGPA>=7.1)
                                               print ("Grade is C")
                                      else
                                               if (8>=CGPA && CGPA>=7.6)
                                                         print ("Grade is B")
                                               else
                                                         if (8.5>=CGPA && CGPA>=8.1)
                                                                  print ("Grade is B+")
                                                         else
                                                                  if (9>=CGPA && CGPA>=8.6)
                                                                            print ("Grade is A")
```

else

if (9.5>=CGPA && CGPA>=9.1)

print ("Grade is A+")

else

endIf

endIf

endIf

endIf

endIf

endIf

endFn

if (10.0>=CGPA && CGPA>=9.6)

print ("Grade is S")

endIf

endIf

endLoop