**Computer Programming**

Computer%20programming%20is%20the%20process%20of%20performing%20a%20particular%20computation%20%28or%20more%20generally%2C%20accomplishing%20a%20specific%20computing%20result%29%2C%20usually%20by%20designing/building%20an%20executable%20computer%20program.%20Programming%20involves%20tasks%20such%20as%20analysis%2C%20generating%20algorithms%2C%20profiling%20algorithms%27%20accuracy%20and%20resource%20consumption%2C%20and%20the%20implementation%20of%20algorithms%20%28usually%20in%20a%20chosen%20programming%20language%2C%20commonly%20referred%20to%20as%20coding%29.%5B1%5D%5B2%5D%20The%20source%20code%20of%20a%20program%20is%20written%20in%20one%20or%20more%20languages%20that%20are%20intelligible%20to%20programmers%2C%20rather%20than%20machine%20code%2C%20which%20is%20directly%20executed%20by%20the%20central%20processing%20unit.%20The%20purpose%20of%20programming%20is%20to%20find%20a%20sequence%20of%20instructions%20that%20will%20automate%20the%20performance%20of%20a%20task%20%28which%20can%20be%20as%20complex%20as%20an%20operating%20system%29%20on%20a%20computer%2C%20often%20for%20solving%20a%20given%20problem.%20Proficient%20programming%20thus%20usually%20requires%20expertise%20in%20several%20different%20subjects%2C%20including%20knowledge%20of%20the%20application%20domain%2C%20specialized%20algorithms%2C%20and%20formal%20logic.

Tasks%20accompanying%20and%20related%20to%20programming%20include%20testing%2C%20debugging%2C%20source%20code%20maintenance%2C%20implementation%20of%20build%20systems%2C%20and%20management%20of%20derived%20artifacts%2C%20such%20as%20the%20machine%20code%20of%20computer%20programs.%20These%20might%20be%20considered%20part%20of%20the%20programming%20process%2C%20but%20often%20the%20term%20software%20development%20is%20used%20for%20this%20larger%20process%20with%20the%20term%20programming%2C%20implementation%2C%20or%20coding%20reserved%20for%20the%20actual%20writing%20of%20code.%20Software%20engineering%20combines%20engineering%20techniques%20with%20software%20development%20practices.%20Reverse%20engineering%20is%20a%20related%20process%20used%20by%20designers%2C%20analysts%2C%20and%20programmers%20to%20understand%20and%20re-create/re-implement.%5B3%5D